Comment Letter I-34

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Dear Mr. Gandesbery and Mr. Jolliffe,

Thank you for the opportunity to comment on the GRR/SEIR/EIS dated July 2002 for the Bel Marin KeysV Expansion of the Hamilton Wetland Restoration Project. The Friends of Novato Creek (FNC) is a not-for-profit citizen based watershed advocacy group focusing on local watershed issues relating to the Novato Creek Watershed. Projects include creek, pond, and estuary health and monitoring, public awareness, and watershed education, biological monitoring, endangered species habitat protection, and assessment of watershed pollutants. FNC has the following environmental concerns and questions related to the development of the " BMKV Wetlands Restoration Project as an extension of the Hamilton Wetland Restoration Project. FNC is very concerned that the Novato Creek, its tributaries, adjacent habitats and the San Pablo Bay ecosystem will be negatively impacted by the BMK-V Restoration Project if our comments are not adequately addressed in the final EIR/EIS.

The main topics of the concerns stated in these comments on the Draft GRR/SEIR/EIS are as follows:

- **Hydrological Watershed Impacts-** The project proposes significant hydrological impacts to the Novato Creek, Pacheco Pond, the contaminated Outboard Tidal / Coastal Marsh parcel, and the Novato Creek watershed, by implementing diversions and structural modifications to current hydrology. These impacts are not adequately studied in the EIR. The Final EIR/EIS must include the Novato Creek Watershed and Pacheco Pond in the Study Area (2.2) and provide studies which accurately model current conditions, defining and mitigating negative impacts. I-34.1

- **Combination of Restoration Sites-** The separate restoration project sites which are divided by the NSD levee and pipeline should be evaluated separately, as they have significantly different land use, planning constraints, requirements and potential impacts, which should require a separate and complete environmental review processes. In attempting to combine these different restoration projects, the GRR/SEIR/EIS has neglected to provide critical technical data/ studies on significant impacts from the Hamilton site while failing to accurately identify environmental impacts from BMK V site on the wetland restoration process and goals. I-34.2

- **Toxics Contamination-** Toxics and hazardous substances identified on the Hamilton/ BMKV sites including the State Lands Commission/Antenna Field, BRAC, Outboard Coastal Marsh, and BMK V parcels are not addressed in any of the following: the GRR/EIR Executive Summary, Planning Constraints, Public Issues and Site Opportunities and Constraints. FNC has previously expressed serious concerns about toxics in responses to the Hamilton Army Airfield Wetland Restoration on the significant environmental issues of adequate toxics remediation protective of environmental restoration. The GRR/ SEIR/EIS lacks the technical data and backup reports on this issue necessary for an adequate public review. ***The EIR/EIS does not acknowledge the extent or distribution of toxics on the BMK V or current state of remediation on the BRAC, Outboard Coastal Marsh, Navy Ball field, and SLC parcels at Hamilton Field.*** I-34.3

- **Incomplete Information and Data-** Necessary data is omitted making the GRR/EIR difficult for the public to access, and review. How can the public or agencies access the environmental impacts of the project when an environmental assessment of the property has not been provided as a part of the EIR/EIS. Detailed remedial investigations for toxics on the BMK V and SLC parcels was not included as a part of these documents. Information provided in the 1998 Hamilton Wetland Restoration Plan is not provided in the GRR/SEIR to correspond with issues related to restoration objectives, development, management, and monitoring. Information on environmental effects from Volume 11 was not provided. I-34.4

- **Planning Constraints-** Re-evaluation of the impacts of co-mingling these two sites should be considered as Hamilton Army Airfield contains base wide toxics and pesticide contamination which must be remediated or immobilized prior to construction. These separate sites should not have soils or materials transported, mixed or commingled with other restoration areas as suggested in the Hamilton Wetlands Restoration Plan (i.e. use of on site borrow material) I-34.5

As a summary comment FNC believes the distribution of this document is premature due to lack of accurate/ current technical data, required studies, more realistic assessments of impacts, and clarification of property ownership and regulatory controls. I-34.6

Executive Summaries GRR/ SEIR
Project Overview
Has project feasibility been assessed based primarily on economic basis of providing a dredge disposal site for the Port of Oakland with environmental issues, impacts and success criteria being minimized? ***Please reference in the EIR.*** I-34.7

Comment:
If the Port of Oakland dredge spoil materials or other sources do not meet wetland cover criteria for Restoration, how will this impact the economic viability of the project to self fund generate revenue ? How frequently will these be tested to assure compliance? ***Please reference in the EIR.*** I-34.8

EIR/ES-3 Project Objectives

- How can this project realistically meet the contradictory Project Objectives specified as: ***"To design and engineer a restoration project that stresses simplicity and has little need for active management"*** **and** ***"To Create and maintain wetland habitats that sustain viable wildlife with emphasis on special status species"?***

Comment:

Adaptive management is an iterative approach, implying ongoing management and monitoring to evaluate progress and evaluate cause/ effect relationships. (Zedler 2001) Maintenance and monitoring (i.e. active "adaptive" management) are critical and as many experts in the field have reported " Fully functional wetlands are not easily created and even fully functional wetlands may not be self sustaining" (Zedler, Weller 1989) Given a timeline of potentially 50 years to develop, who will be responsible for maintaining, managing, and monitoring this 2,526 acre restoration site? Without a long term adaptive management plan and maintenance program this project cannot achieve a true restoration of habitats. Review of other local Restoration Projects using dredge spoils demonstrates many challenges including material consolidation, pollutant release, and dredge material stabilization. Tidal wetland restoration sites all require maintenance, continual observation and adequate budgets for short and long term actions such as irrigation, replanting, fertilizing and managing exotic species removal. An ability to respond to unexpected events such as discouraging herbivores, algae blooms, and sedimentation events is critical to the success of a restored Wetlands Project. (Zedler 2001).

Please address these issues in the final EIR.

I-34.9

ES-6 Significant Unavoidable Effects

ES-6 *"There is a potential for an increase of methyl mercury production due to the increase of tidal wetland acreage in contact with sediments containing mercury"* References from a recent paper on Mercury in Tidal Wetlands (Davis, Yee, Collins et al.) implicate tidal wetland restoration activities as possibly leading to increased concentrations of mercury in the estuarine food web and exacerbating the mercury problem. What is being done to assure that this effect is monitored and minimized? ***Please reference in the EIR.***

Comment:

Recommendations from this paper specify where dredged sediments are used that the mercury load must be analyzed routinely and channel design must be considered in relation to mercury loads. What predictive modeling of percent methyl mercury has been done on tidal circulation and residence times as mercury toxicity to clapper rail embryos is appears to be one of the primary causes of mortality in this endangered species? ***Please reference in the EIR.***

I-34.10

Comment:

The creation of tidal wetland from the flooding diked farmlands is reported to result in particularly high rates of mercury bioaccumulation. Creation of tidal wetlands through placement of dredge material is reported to result in higher methyl mercury production, unless the material is low in organic content, microbial activity, or total mercury. It is recommended that the potential for increased methyl mercury production associated with dredged material reuse is evaluated before the project is initiated. Has this been done? Numerous studies on percent methyl mercury as an indicator of rate of methyl mercury production and wetland physical characteristics are available. This information should be incorporated into the EIR, surveys on the existing mercury concentrations in the food web should be provided for the site, and long term monitoring should be conducted to confirm.

Please answer the above questions and incorporate this information into the EIR.

ES-6 Significant Unavoidable Effects- Levees- Please evaluate the option of increasing the distance to the new levee construction (2000 feet) by increasing the buffer zone as an alternative to provide a more natural and gradual wetland to upland ecotone? Please define both slope and planting specifications which are critical to maximizing habitat value and the natural transition zone functions in the EIR. I-34.11

Please include the above discussion into section Executive Summary of the EIR.

ES-3 Restoration Alternatives

Please explain the scientific basis for the restoration design criteria for Alternatives 1, 2, and 3 as the rationale for design components including hydrology, habitats, levees/ locations, Bay Trail access specified. Technical basis for Alternatives1-3. is not clear. i.e. a. Alternatives 1 and 2 do not seem significantly different. Please clarify objectives. I-34.12

Table ES-1

FNC's Preferred Restoration Alternatives which are not indicated in any of the Proposed Alternatives and are noted as follows:

Habitat- Increase habitat diversity from Alternative 1 to include more diverse ecotones, habitats and upland areas and provide scientific rationale for allocations.

Buffer Zones- Increase buffer zones to 2000 feet from harmful local residential impacts and create a longer natural gradient to the high marsh on the outboard side of the levee.

Outboard levee breaches- San Pablo Bay only -No negative impacts to the Novato Creek Watershed including increased sedimentation and decreased freshwater or tidal flows and scour are acceptable. I-34.13

Pacheco Pond- Provide a direct tidal connection to Novato Creek to allow passage of endangered and special status fish to Novato Creek Tributaries i.e. Arroyo San Jose and promote improved circulation in the Pacheco Pond re-establishing this historic connection to the Novato Creek. (1897 topographic map)

New Levees- Alternative #1 located 2000 feet from residential impacts with appropriate planting and slope

Bay Trail should be located as to have minimal impacts to the restoration project. Bay Trail access trail along the existing Pacheco Pond is NOT preferred. Interpretive Center located on City property west of HWRP where it will have minimal impacts and provide the best site overview.

ES-7 Please describe how the site will be monitored and managed during the potential 28-45 year wetland establishment process. What agency(s) will be responsible for ongoing management? How is this funded? I-34.14

Please include the above discussion into section Executive Summary of the EIR.

ES-9 While it is noted that the Conservancy does not support Alternative 3 based on the reduced use of dredge material, the EIR should also note that the Alternatives 1 and 2 offer a higher risk of methyl mercury production and subsequent accumulation in the food web. This predicted outcome does not support the project objectives of creating a productive habitat for endangered and special status species. I-34.15

Please include the above discussion into section Executive Summary of the EIR.

ES-11 Management Considerations

See ES-3 Project Objectives- ***Please include the above discussion into section Executive Summary of the EIR.*** I-34.16

ES-11- Beneficial Use of Dredge Material
Please provide sampling and data analysis which clearly demonstrates that use of dredge material from sources such as the Port of Oakland will be beneficial and will not produce any adverse impacts over use of natural sedimentation. Please provide specific data from modeling this project and related local restoration projects i.e. Muzzi Marsh, Montezuma Wetlands, Sonoma Baylands or others. ***Please include the above discussion into section Executive Summary of the EIR.*** I-34.17

ES-11 Site Opportunities and Constraints
Please discuss land use and planning constraints relative to known and yet un-remediated hazardous materials and toxic contamination on the State Lands Parcel, BRAC, Outboard Tidal Coastal Marsh, historic Navy Ball fields and BMKV properties. ***Please include the above discussion into the Executive Summary of the GRR/EIR.*** I-34.18

GRR/ Chapter 1.
Section 1.3 Planning Process- Recommendations and concerns from major BMKV stakeholders including the Bel Marin Keys Planning Advisory Board/CSD made over 2 years ago on hydrological and environmental concerns of this impacted community have not been acknowledged. Studies requested through the "Stakeholder" process on critical impacts have not been initiated or incorporated into this GRR/SEIR. ***Please note this concern in Chapter 1, Planning process and all relevant sections of the EIR.*** I-34.19

Section 1.4 Prior Studies and Reports- Mention of reports documenting toxic contamination i.e. Draft Final Record of Decision/Remedial Action Plan, Inboard Area Sites Army BRAC Property, Hamilton Army Airfield, Focused Feasibility Study on the Hamilton Wetland Restoration Project. ***Please add the above information into the final EIR/EIS.*** I-34.20

GRR/Chapter 2.0
2.2 Study Area Description- The Study Area should include Novato Creek, Pacheco Pond, contaminated Outboard Marsh parcel/ BRAC, and the Novato Creek Watershed including tributaries -Arroyo San Jose and Pacheco Creek as these areas are significantly impacted by implementing diversions and structural modifications to current hydrology. ***All potential levee breaches should be referenced with long and short term impacts being accessed in the EIR.*** I-34.21

2.3.2 Land Use- Site history should be corrected throughout all documents to reflect that this parcel prior to the mid 1800's was primarily underwater with the historic shoreline about midway (2 miles into the BMKV site) through the "BMKV" site. From 1954-84 Hydraulic mining produced sediment buildup in the Bay, resulting in accretion along the shoreline. This was diked and drained in the early 1900's. The property has been used for dry land farming continuously since the early 1900's (3.0 LSA 1996) In the 1940's freshwater wells supported the farming of tomatoes indicating a supply of fresh water was obtained from the groundwater wells. Previous Land Use does not reflect the use of the BMKV site and Pacheco Pond as a practice bombing range and fly zone for HAAF. ***Please reference this information in Chapter 2 and all relevant sections of the EIR.*** I-34.22

2.3.4 Hazardous, Toxic, and Radiological Waste
The "Results of Shallow Soil Investigations" does not include the following contaminated areas which pose hazards to environmental restoration and the goal of habitat creation for special status species. ***Please include specifics on the un-remediated toxic contamination on the State*** I-34.23

Lands Commission Parcel, Outboard Tidal Marsh/ BRAC parcel and including reported disposal sites scheduled to be investigated by the Army in this section of the EIR. I-34.23 Con't.

2.3.5 Regional Hydrology

The natural, historic confluence of the Pacheco Creek and the Arroyo San Jose Creek with Novato Creek is documented in topographic maps in 1897 and earlier. This critical link to San Pablo Bay was later disrupted and re-routed by the filling of the BMK commercial areas and the artificial creation of Pacheco Pond/ Ignacio Reservoir a "freshwater wetland" mitigation site for the BMK Industrial Park. This connection was open to San Pablo Bay as a result of broken flap gate flood control system existed until the recent replacement of tide gates in 2001, which have now blocked fish passage. This "enhanced" habitat area has not restored lost habitat but recreated an artificial freshwater habitat area. This artificial habitat is actually a brackish to salt water habitat (salinities 5-20+ppt) with many salt water/brackish plant species including Salincornia spp. abundant. The historic confluence of the Pacheco Creek and Arroyo San Jose Creek with the San Pablo Bay would be destroyed if the Proposed BMKV wetlands project is constructed as presented in these EIR/EIS Alternatives. I-34.24

Please correct and clarify the hydrological connections in this section, and include information in the EIR.

2.3.5.1 Local Hydrology

Generalized ground elevations are not accurate on portions of the BRAC parcel, i.e. Wetland/ Upland Mitigation areas are much higher. The previous failure to create seasonal wetland habitat on the NW runway (BRAC parcel) appears related to higher elevations which make this not feasible. Please clarify how this will be corrected. Has current hydrology been mapped for the combined sites and impacted water bodies? ***Please address the questions listed above in Chapter 2 and all relevant sections of the EIR.*** I-34.25

Pacheco Pond –This mitigation project from the 1970's is not a true freshwater habitat as salinities range in the 5-15ppt range and specific freshwater plant species which have been planted as a part of restoration efforts have not survived, possibly due to high salinities in sediment and water. This pond and its water levels are not managed or monitored at the desired levels. The description provided in the EIR is taken from outdated reports and should be corrected to reflect current conditions and information. ***Please revise this information in the EIR.*** I-34.26

Novato Creek- This description based on 1996 data is outdated or incorrect. Pictures provided to the Coastal Conservancy show flooding of BMK Blvd. in 1998 at BMK entrance and overtopping of BMK south lock by the Novato Creek in 1998, 2000, and 2001. ***This description provided is based on outdated reports and should be corrected to reflect current conditions and accurate bathymetry in the Final EIR.*** I-34.27

BMK Residential Development- The agreement with the former property owners of the BMK Granted the right to discharge flood water on to a **300 acre** portion of the BMK V property not a 3 acre portion as specified in the GRR. ***Please correct this information.*** I-34.28

Hamilton Army Airfield Drainage

PDD Comments on flows to SP Bay. ***Please reference flood overflows and levee blowouts from the BRAC parcel which resulting in flooding from the LF26 mitigation area onto the BMKV parcel in the EIR.*** I-34.29

2.3.6 Geotechnical Conditions

Please provide a complete geotechnical survey mapping the presence of substrate from historic creeks and sloughs throughout the BMKV and HAAF sites and model how this will affect wetland development? Data on soil salinity, compaction, texture, moisture, and organic matter content is critical to modeling. Has the soil and substrate conditions of the BMK V and BRAC parcels been mapped comprehensively? Please reference this information in the EIR? Is Bay mud be assumed to cover the entire area of the site without an actual study and what is the distribution of the stronger, less compressible soils mentioned across both sites? Please provide calculations for the depth of the Bay mud and the subsequent project development time providing a more accurate "estimate" than 10-50 years. What are the conclusions being developed based on the NHP levees sinking and tipping at a significant rate of over 1 foot per year. How will this affect the proposed levee development and berms used to protect toxics movement on the site? I-34.30

Please address the questions above in Chapter 2 and all relevant sections of the EIR.

2.4.1.2 Historic Decline of Species as related to Chemical Contamination

Please discuss the historic flushing of toxic contaminants out to the Bay from over 50 years from the pumping of unmonitored toxic runoff from HAAF into PDD, directly in to San Pablo Bay. Please discuss how sediment toxicity and contaminant stressors have also impacted the populations of special status species. Overall sites in San Pablo Bay and the mouth of the Petaluma River / Novato Creek are some of the most contaminated sites in the Bay. I-34.31

Please include the above discussion into section Chapter 2 of the EIR.

2.4.2.2 Increased Habitat Quality and Quantity

Removal of habitat diversity and creation of a mono landscape of primarily tidal marsh habitat theoretically to support the Clapper Rail is not compatible with project goals. The creation of a diverse array of wetland and wildlife habitats, not only for endangered species, but also for migratory and resident species is critical to the success of this project. The importance of the wetland – upland interface is referenced in the San Francisco Estuary Restoration. Project Primer. According to SFEI approximately 74% of the alluvial soil habitats adjacent to the Bay have been lost. This is also a significant problem as these support two important Bay ecotomes, moist grassland/ vernal pool habitats and riparian zones. Please describe why these valuable ecotomes are not clearly defined as lack of high ground next to marshes has contributed to the declines of species such as the back rails, clapper rails, and salt marsh harvest mice. Transitional habitats provide food chain support to upland species such as the burrowing owl and the red tail hawk, and the presence of a wide buffer may reduce upland predator foraging. Please explain why there is a minimal upland transition when over 80% of the Bay special status species depend on these ecotonal areas. (4.SFEI) Please explain how this site is contiguous as it is divided by a NSD levee? I-34.32

Please reference the documented predation of the Clapper rail on the Salt marsh harvest mouse in the relevant EIR sections.

2.4.2.3 Unit Cost Savings

The GRR description and location of levee's not needing to be constructed is unclear . What is the estimated cost saving by combining the projects? ***Please clarify which BMKV perimeter levees would not need to be constructed as levees on the BMK community side and BRAC/ Hamilton side are still required along the NSD outfall in the EIR?*** I-34.33

2.4.2.4Beneficial Use of Dredged Material I-34.34

See ES-11

2.5/ ES-11 Planning Constraints

2.5.1 Minimization of Impacts to Existing Threatened and Endangered Species Wetlands

Low, Mid, and High marsh habitats (2.4.2.2.) will be destroyed in the construction process and existing salt marsh harvest mouse and clapper rail populations will be impacted. Please clarify how this will be minimized or avoided. In addition endangered fish species will be impacted by the destruction/ diversion of creek and tidal flows, and excess sedimentation. ***Please clearly define how this environmental damage will be minimized in the EIR. Please address the following concerns in Chapter 2 and all relevant sections of the EIR.*** I-34.35

Historic Flooding of the Hamilton Air Force Base property and adjacent parcels. Please reference serious fate and transport issues regarding toxic contamination on HAFB and neighboring properties due to historic flooding of the properties.

Cover and fill requirements specify maintaining a 3 ft clean cover between toxics and receptors as recommended on the HAAF parcel. Please indicate where this is referenced in the EIR? I-34.36

Excavation and exposure of wetland soils and stockpiled soils can create acid sulfate soils. How will discharge of acidic material to Novato Creek and San Pablo Bay, which can harm habitat and kill fish, be prevented?

If contaminants are uncovered during restoration efforts what construction and hazardous management plan is in place to decontaminate or remove contaminated soils or substrate? Please provide a map of all known toxics contamination on both sites and status of remediation.

2.5/ ES-11 Planning Constraints

Use of inappropriately defined dredge material could promote the destruction of the endangered species the project is mandated to promote. Please indicate where actual testing data for toxics in sediment and elutriate from prospective dredge spoils and corresponding results discussion are provided in the EIR? Please define all criteria for dredge materials to be used including texture, composition, organic content etc. in the EIR ***Please address the following concerns in Chapter 2 and all relevant sections of the EIR.*** I-34.37

HAAF Groundwater issues are still not being dealt with on a base wide level. No comprehensive monitoring program is in place, nor has a data map for all of the groundwater data gathered so far, been produced. Information presented contains contradictory statements between the ROD/RAP and the FFS regarding groundwater contamination. Please correct these discrepancies.

The HAAF storm drainage system (under the HAAF runway) is still in place, and contains significant contamination of concern. Please discuss this issue of concern in the EIR/EIS document as it directly relates to the wetlands conversion plan and final design. I-34.38

Please describe how toxics on both sites will remain immobilized and not be released to the Bay in an unpredictable environment such as an emerging wetland restoration?

Base wide DDT's ands widespread contamination of CERCLA substances has always been a critical issue, but in light of the Historic Flooding evidence which includes flooding onto the BMKV parcel, and channelization from the proposed Wetlands Project Design, it has become even more of an increased concern.

ES-12 Historic hydrological linkages of the Novato Creek to the area now occupied by the Pacheco Pond (created in 1970), Arroyo San Jose Creek and Pacheco Creek are documented in maps 1987 U.S. Coast and Geodetic Survey. This linkage indicates possible passage for special status fish species. ***Please demonstrate how this important hydrological and environmental linkage will be restored or maintained in the final Wetland Restoration Alternatives in the EIR.*** I-34.39

ES-12 Extension of the Bay Trail to the Novato Creek would produce significant negative impacts, and human intrusion detrimental to the project restoration objectives and protection of endangered species. FNC requests that this spur should not be allowed. This significant intrusion into the wildlife corridor would disturb the very endangered species the project is designed to protect. Project design should be balanced and significant buffer zones established to minimize disturbance. ***Please address this issue in the EIR.*** I-34.40

ES-13 Please explain how integration of the BMKV site with the State Lands Parcel can be considered given the need to create a deep and unpredictable tidal channel across an area that is documented to contain toxic and contaminated soils. ***Please address the hydraulic modeling and immobilization of sediment required to prevent toxic contamination from being released to the Bay in the EIR.*** I-34.41

2.5.3 NSD

Please clarify that the NSD outfall pipeline and berm effectively results in dividing the site and making the proposed expansion project not contiguous as previously referenced in the EIR. I-34.42

2.5.6 Please provide toxics testing data on the prospective sources of Dredge Material including the Ports of Oakland and Richmond and methodologies used as this data is necessary to assess the viability of the proposed project alternatives. ***Please address this issue in Chapter 2 and all relevant sections of the EIR.*** I-34.43

2.5.7 HTRW

Please define HTRW (Hazardous Toxic and Radiological Waste)in the text of the EIR. What sampling has been done on site? Please show a map of toxics on this and the BMKV site. Please discuss the results of the testing of the Spoils Site A for mercury, methyl mercury and other contaminants which may be detrimental to wetland species and result in localized mercury bioaccumulation. ***Please address these concerns in Chapter 2 and all relevant sections of the EIR.*** I-34.44

2.5.8

Please provide all data and calculations of the protection of the local community from flooding and negative impacts. ***Please address this issue in Chapter 2 and all relevant sections of the EIR.*** I-34.45

2.5.9

Why is alternative #1 being considered if it would result in a loss of wetland habitat? ***Please address this issue in Chapter 2 and all relevant sections of the EIR.*** I-34.46

2.5.10

Please describe how this project prevents negative impacts to adjacent properties and the Novato Creek in the EIR? I-34.47

2.5.11
Please describe how increased sediment deposition in the Novato Creek will be avoided or mitigated in the EIR? I-34.48

EIR-2-9

- What toxics and elutriate studies have been completed on the Port of Oakland Dredge Spoils? Will dredge spoils be used to cover toxic contamination at the HAAF site and if so what is the interaction or combined environmental effects of toxics on site with dredge spoils?
- How will the agencies guarantee that these toxics will remain immobilized in place and remain on site? I-34.49
- What ongoing monitoring will take place to assure the public that toxics are not migrating off site?
- What confirmation testing has been completed to assure that all UXO from military bombing activities has been identified and removed from the areas now identified as BMKV, Pacheco Pond, SLC and Outboard Tidal Marsh. These were reported bombing practice targets in mid 1900's . ***Please address these issues in Chapter 2 and all relevant sections of the EIR.***

SLC- All three alternative utilize the SLC (Identified as the NAF in Appendix B) as an integral part of the overarching wetland restoration design. Please refer to properties by a consistent name. Given that the SLC/NAF parcel is a known area of significant toxic contamination please explain the rationale for including this area without any information of actual feasibility of construction of channels through the site. I-34.50

- What is the timing for a remedial investigation and when will this be completed?

Please address these issues in Chapter 2 and all relevant sections of the EIR.

EIR 3-3 Please explain how Alternatives 1-3 retain a connection for fish passage from San Pablo Bay and Novato Creek to Arroyo San Jose, a listed habitat for endangered species including, Chinook, Steelhead and other native endangered and special status species. ***Please address this issue in Chapter 3 of the EIR.*** I-34.51

EIR 3-5 Please designate a possible Alternative which removes the SLC from the project as this area has been identified to contain quantities of toxic contamination which has yet to be completely identified, and remediated. ***Please address this issue in Chapter 3 of the EIR.*** I-34.52

- Who is responsible for remediation of each property?
- What is the timing for future remediation actions? Is the BMKV Project viable without the SLC parcel as this constitutes as large portion of the project?

EIR –3-12
Please clarify that soils will not be moved between project sites as referenced in the Hamilton Wetland Restoration EIR and that on site Borrow material will be limited to soils which have been recently tested and confirmed not to contain any toxic contamination meeting the criteria for clean cover material. Please address this issue in Chapter 3 of the EIR. I-34.53

- How will the developer assure that contaminated soils will not be transported or used in wetland creation? ***Please address this issue in Chapter 3 of the EIR.***

EIR 3-12

- How will the construction activities be managed to minimize the distribution of airborne contamination (i.e. air pollution) from the destruction of existing infrastructure and the movement of contaminated soils and sediments.
- How will this be actively monitored during construction?

Please indicate where in the EIR document the detailed plan for dust, air pollution and construction noise monitoring and mitigation is addressed over the length of Construction. These describe how these impacts will be assessed in detail and include in the EIR. I-34.54

EIR 3-16

Please elaborate on how this cover material will be stabilized as many areas require 3 feet of stable clean cover to remediate buried toxics and site wide pesticides, PNA's, and heavy metal contamination. Please specify testing requirements and permit requirements before discharge into San Pablo Bay in the EIR I-34.55

EIR 3-18 ***Please indicate an Alternative plan if the SLC/NAF parcel is determined financially unfeasible to remediate as a result of toxic contamination and discuss this possibility in EIR.*** I-34.56

EIR 3-22 Please identify where the description of internal levee and phase levees construction is located in the EIR/EIS? ***Please include answers to the following questions in Chapter 3 of the EIR.***

- How will these internal levees be stabilized? How will 2nd and 3rd degree channels be created and stabilized?
- How will heterogeneity and biodiversity be assessed and enhanced by each Alternative?
- Which Alternative will result in a wetland with the highest natural heterogeneity and corresponding biodiversity?
- What local or regional reference sites were used to develop these models?

I-34.57

EIR 3-3 ***Please provide a Summary Comparison of Associated Environmental Benefits projected from each Project Design Alternative.*** I-34.58

EIR 4-7 Please note that the NHP levees constructed along the HAAF property are reportedly sinking at a rapid rate.(>12"/year) ***Please confirm and identify this issue and settling rate in the EIR.*** I-34.59

EIR-4-2 Geology Soils and Seismicity data sources are incomplete and should be expanded to include data from the adjacent studies at HAAF/ BRAC, SLC, and Navy Ball fields. I-34.60
Where are the geology studies from the adjacent properties at HAAF described in the EIR?
Please include the above discussion into Chapter 4 in the EIR.

EIR 4-38

- What requirements and permits must by obtained to discharge elutriate into the Novato Creek and San Pablo Bay? Please reference all State and Federal Permits required including those related to creek diversion and destruction of endangered species habitat.
- What remediation of toxic and hazardous material is mandated before a design is approved and what agency has final jurisdiction?

I-34.61

Please include the above discussion into Chapter 4 in the EIR.

EIR 4-47

Pacheco Pond/ Ignacio Reservoir – ***Serious Water Quality Concerns***- Indicators of poor water quality are documented in Pacheco Pond in 1999-2001. *Beggitoa spp.*, a filamentous sulfur oxidizing bacterium which indicates areas of abundant H2S (hydrogen sulfide) or sewage was identified in above normal levels in Pacheco Pond during and after several recent fish death (2000-2002) incidents (Rhomberg Tiburon Center, personal communication). This indicator of stagnant and poor water quality along with high *Enteromorpha spp.* cover over the pond in the winter/spring can signal a stagnant water system, which has had historically high incidents of fish death, presumably due to high temperatures and low dissolved oxygen (MCSTOPP). This habitat that could be improved by re-establishing the historic connection to the Novato Creek and San Pablo Bay improving circulation and water flow. A study is requested to examine impacts to Novato Creek resulting from loss of potential tidal prism useful in scouring the creek to maintain channel equilibrium. The EIR does not address impacts from diversion of Pacheco Pond flows on water quality, sedimentation, flow rates, depth and existing endangered species habitat as opposed to greater tidal exchange during seasons of low flood threat? ***Please include the above discussion in the relevant sections including Chapter 4, relating to Pacheco Pond and Water Quality in the EIR.***
Please address the redirection of Pacheco Pond flow during normal conditions and referenced reduction in water levels, and any other potential impacts, and include in the EIR. I-34.62

It should also be noted that the Novato Creek and Pacheco Pond are tested monthly and results regularly indicate levels significantly above recreational water quality standards for pathogens. Water quality data has been submitted to the SWRCB on the Novato Creek recommending that the Novato Creek be listed as an impaired body of water for both sediments and pathogens. Testing is ongoing to document this request.
Please note this information and include in the EIR. I-34.63

Proposed alternatives which would re-route fresh water flows from Pacheco Pond into a newly created freshwater seasonal marsh are not acceptable. Connection of the wetlands project to the Pacheco Pond / Ignacio Reservoir should be studied further as historic contamination of this site from 50 years of use in the flight path of Hamilton Army Airfield, produced toxics including pesticides, PNA's, PAH's, Metals Dioxins, etc. The Airfield and Military Base were active until 1993 and further investigations of toxics from recent reported disposal near Pacheco Pond should be assessed. Recent indicators of water quality problems in Pacheco Pond, and resulting fish and invertebrate death and human contamination have yet to be adequately investigated by sediment testing on this historic military property.
Further testing is required to ensure protection of environmental health and safety. Please provide further testing of Pacheco Pond sediments to assure that this area will not contaminate the wetland restoration project in the Final EIR/EIS. I-34.64

4-47 Correction: The county took sediment samples in storm drains in BMK Industrial Park. Minimal potential contaminants were analyzed. This was a part of the County TMDL testing requirements and was not a result of concerns relating to potential toxic runoff from HAAF/ Hamilton, or concerns about fish deaths. The Pacheco Creek was not tested. The highest values for pesticides in the storm drains was in BMK Industrial Park adjacent to a Pest Extermination Company. ***Please correct this information in the Final EIR, Chapter 4.*** I-34.65

Reported Hazardous material dumpsites near Pacheco Pond (documented in the ASR2001) have yet to be investigated or tested by the BRAC Cleanup team.
Please note this reported toxic site as unaddressed in the EIR . I-34.66

EIR 4-126 ***Please provide a chart by site of toxics identified, remediation actions and timing. Please provide a map that includes all toxics identified on both sites, concentrations , and estimated risk factors to the endangered species population.*** I-34.67

Miscellaneous General Comments;

1. The project name " Bel Marin Keys V Expansion of the Hamilton Wetland Restoration Project" is misleading as "Bel Marin Keys V" refers to a failed waterfront housing development project from 1995, which the local community of Bel Marin Keys and environmental groups, strongly opposed as being environmentally unsound. This Federal Project should replaced with a name which accurately references the historical landowners of the property. (i.e. Ignacio Pacheco Wetlands). ***Please correct the current name of this project as it misrepresents the project site as integrated with the Bel Marin Keys Community.*** I-34.68

2. The GRR/SEIR/EIS appears to feature a photo of the Novato Creek on the cover yet all reports have categorically refused to study the negative impacts to the impacted watershed from the proposed project alternatives and hydrological modifications. The impacts to the Novato Creek Watershed including the deposition of sediment from erosion upstream at a rate of .8-1vertical foot per year and decrease in total cross sectional area of 50-100 % as documented in (1.0 / PWA 1996) are not addressed. Please provide all calculations, data, and assumptions which were used to evaluate, quantify and predict sediment accretion in the Novato Creek adjacent to the breech of the Creek and include all creek modification impacting potential routes of sediment transport and decreased flows. I-34.69
Please include the above information into all relevant sections and discussions of hydrology in the GRR/EIR.

3. The proposed restoration alternatives do not provide for the required ponding area specified by Marin County Flood Control of 300 acres for flood protection. This entire project site is designated as an F1/F2 zone which is Primary or Secondary Floodway District and designated such so that no building, dredging, filling or levee or dike construction is permitted. Removal of the F2 zoning is not protective of the local community and will require local residents to purchase Flood insurance. Flooding conditions in Bel Marin Keys exists during periods of coincidental storms, high tides and wind. Diversion of flood waters to Novato Creek at those times is not feasible to mitigate flooding as waters which are typically flowing into the BMK lagoons as photos documentation provided to the developers has indicated. Storm water/ tidal overflow must be stored until the tide and creek elevations subside, which can take days to weeks depending on rainfall amounts. The Restoration Alternatives provided must provide a plan for the specified storage capacity of 300 acres and /or offer mitigation funds to reimburse all impacted local homeowners for the added economic burden of the expense of purchasing Flood insurance annually. ***Please include the above discussion into the discussion and summary of mitigation measures in the EIR.*** I-34.70

4. A current study of the surface water hydrology and tidal hydraulics for the BMKV expansion is not included in the EIR to determine that the decrease of capacity of secondary floodplains and impacts on adjacent habitats. Modeling studies provided in the EIR used old and inaccurate data and flow models. The hydrological impacts to the entire watershed require further investigation , using accurate documentation and current data. Removal or reduction of area for overflow I-34.71

ponding, or reliance on mechanical pumping would create a significant negative impact and is not an acceptable alternative.

Please provide a current study of surface water hydrology and tidal hydraulics for the Novato Creek Watershed which demonstrate that no negative short or long term impacts to creek flow rates and morphology will result from this project. This study should be modeled for the length of project/ site maturation i.e. 30-50 years depending on the Alternative considered and options presented in the EIR. I-34.71 Con't.

5. The proposed modifications to Pacheco Pond and the proposed diversion of flow away from Novato Creek considered in the design alternatives will present substantial effects. Historically this area was part of the Novato Creek watershed as documented in the (1897 Topographic map Treasury Dept. Register 2447). Documented accounts are found in the literature (1876) of 20 ton sloops transporting produce to the Novato wharves, indicating significant depth and breadth of the Novato Creek in the late 1800's and early 1900's.. I-34.72

The natural, historic confluence of the Pacheco Creek and the Arroyo San Jose Creek with Novato Creek is also documented in maps dating 1897 to 1912. ***Please include the above information into discussions of the Pacheco Pond and Novato Creek linkage in the EIR.***

6. Endangered and Threatened Species and Fish Passage- This critical environmental connection to San Pablo Bay was later disrupted and re-routed by the filling of the BMK commercial areas and the artificial creation of Pacheco Pond/ Ignacio Reservoir "freshwater wetland" as mitigation for the commercial areas is now still until the replacement of tide gates have blocked fish passage. This "enhanced" habitat area has not restored actual lost habitat but recreated a fictional freshwater habitat area. This habitat is actually a brackish to salt water habitat (salinities 5-15ppt at the bridge) with many resident salt water/brackish plant species including <u>*Salincornia spp*</u>. abundant. The historic confluence of the Pacheco Creek and Arroyo San Jose Creek with the San Pablo Bay could be destroyed if the Proposed Unit V wetlands project are constructed as presented in this EIR/EIS. The Novato Creek and its tributaries including Arroyo San Jose are documented habitat for threatened, and endangered fish species including Chinook, Steelhead, and other special status fish species(* Photos have been provided of endangered Chinook building redds in Arroyo San Jose Feb 2002.-MCSTOPP) Blockage of fish accessibility to the Novato Creek and reduced flows as a result of this restoration project should be addressed in the EIR as a take of Federally listed endangered species habitat. ***Please include the above information into the discussion and summary of the Pacheco Pond and Novato Creek existing habitats and address mitigation measures in the EIR.*** I-34.73

7. Alternatives 1 & 2 include a marsh basin connection to Novato Creek through a single levee breach of the Novato Creek levee to provide for tidal exchange into a created wetland. There is no analysis of the potential impacts of the levee breaching in the immediate vicinity of the breach and upstream in the Novato Creek. While the added tidal prism may increase the channel cross section, the condition of the channel in the vicinity of the breach and upstream could be negatively impacted. Modeling is not based on specifics relative to Novato Creek and accurate bathymetry. Data from various sloughs may not provide data consistent with erosion due to upstream and tidal effects and may not incorporate effects of bank soil composition. Documentation of the expected increase in the channel cross section is not provided. There is no analysis of impacts to normal existing tidal hydraulics. There is no study determining present creek flow. ***Provide verification of creek flow in the lower reaches of Novato Creek by installing a flow gauge or equivalent in the EIR. Resultant channel widening of between 10 and 25 feet along the channel corridor of Novato Creek may have significant negative impacts to the channel.*** I-34.74

Provide cross sectional data to show impacts on flow rate. Please identify where the corresponding "10-20 acres of eroded marsh flood plain" will occur in all relevant sections in the GRR/EIR. I-34.74 Con't.

8. The hydraulic analysis contained in the Appendix concludes that the added tidal prism should increase the channel cross-section downstream from the breach.
Please provide all calculations, exact locations and assumptions for each Alterative which defines added tidal prism creation, increased channel width, channel depth, channel erosion, and flow rates. Revise description to reference wetland cells which vary in size from approximately 400 to 600 acres as not contiguous unless the NSD outfall pipe is re-routed.. I-34.75

9. Please address the short term vs. long term impacts of sedimentation of the Novato Creek in the EIR. The SEIR/EIS assumes that sediment transport will be from San Pablo Bay to the created wetlands. It has been documented that sediment from bank erosion in the upper watershed is significant. (2. Laurel Collins 1998) . "This report states that bank full discharges appear capable of transporting and distributing the load downstream to the tidal reaches". What is the effect in both the long term, and short term impacts of sediment transport from the upper watershed as the wetland is being established. In addition the creation of internal channels in the wetland from erosion of freshly deposited dredged material could cause sediment transport into Novato Creek and the development of shoals or deltas. ***Please address these issues in all relevant sections of the EIR.***

a. What are the potential impacts to shoaling in the Novato Creek from the initial breaching of the levee prior to the equilibrium condition of the created wetland? I-34.76
b. Provide modification to sedimentation processes and morphology in Novato Creek due to relocation of Pacheco Pond outlet and breach and/or lowering of BMK/Novato Creek Levee.
c. Provide modification to sedimentation processes and morphology in Novato Creek due to breach of BMK/Novato Creek Levee and loss of potential tidal prism caused by relocation of Pacheco Pond outlet.
d. Identify the morphologic adjustments and changes within San Pablo Bay and Novato Creek that could develop over time as a result of construction of tidal outlet channels through the existing salt-marsh and mudflats. Please supply a study and/or analysis of impacts to the existing Novato Creek that include the reduction of flow and therefore scour due to relocation of Pacheco Pond outlet will not have significant negative impact, especially during low flow summer months.
Please include the above data, technical assessment, and modeling into the discussion of all sections referencing Hydrology in the EIR.

10. Elimination and removal of the large groves of Eucalyptus trees along the BMK South Lagoons and open fields used for avian foraging will adversely impact resident and migratory raptors such as the Golden Eagle, Redtail Hawk, Red Shouldered Hawk, Whitetailed Kite, Kestrel, Peregrine Falcon, Great Horned Owl, Bats, and Barn Owl. The existing groves of trees are used for roosting and nesting by significant numbers of Great Egrets, Snowy Egrets, Great Blue Herons, Turkey Vultures and raptors. The proposed site of the interpretative center is a valuable roosting and nesting habitat and human impacts near this area should be prohibited. I-34.77
Please include the above information into summary of mitigation measures and Bay Trail references in the EIR. Please consider alternatives which avoid destruction of these habitats.

11. The finding of less than significant impact and no mitigation required for loss of agriculture is not supported by the previous final EIR/EIS for BMK V development (1992). The loss of local oat hay product and conversion of potential prime agricultural land to other uses were both I-34.78

considered to be Class I impacts, which are unavoidable significant impacts. Most of this site has historically been and is currently farmed. I-34.78 Con't.
Please include the above discussion into relevant sections and Executive Summary of the EIR.

12. Approximately 135-550 acres of mosquito habitat would be created by the restoration project. Reliance on pesticide spraying could have grave environmental impacts and is not acceptable. Characterization of existing conditions described in the SEIR/EIS are misleading. Land currently used for agriculture is tallied as ponding area which is not correct. Displaced rodent and predator populations are not addressed in the SEIR/EIS. I-34.79
Please include the above discussion into section Executive Summary and mitigation measures in the GRR/EIR.

13. ***Please provide a comprehensive adaptive management and long term monitoring plan, including maintenance and annual funding allocations for contingency repairs to infrastructure including levees, excess sedimentation removal, replanting, changes to hydrological features, and flood control improvements and other unforeseen events in response to the adaptive management approach as an appendix to this EIR. Please identify:*** I-34.80

- What funds are allocated annually to guarantee the state's ability to pay provide the adaptive management necessary to assure that project goals an objective are met?
- What contingency funding will be kept in reserve for damages and negative environmental impacts resulting from this project.

Thank you for addressing these questions and concerns in the Final EIR.
Sincerely,

Sue Lattanzio
President, Friends of Novato Creek

References:

1. Channel Design Recommendations Lower Novato Creek, Phillip Williams Associates, Ltd. October 1996
2. Sediment Sources and Fluvial Geomorphic Processes of Lower Novato Creek Watershed, Laurel Collins, July 1998

cc: Cynthia Murray, Marin County Board of Supervisors
Craig Tackabery, Marin County Department of Public Works
Jennifer Barrett, City of Novato Planning Depart.
Tom Selfridge, Novato Sanitary District
Chris De Gabriele, North Marin Water District
Pat Baldarama, Marin County Flood Control District
Eric Tattersall, California Dept. of Fish & Game
Fran Pavley, State Assemblymember
Tom Keeley, State Assemblymember
Joe Nation, State Assemblymember
Mary Nichols, California Resources Agency
The Honorable Harry Reid, U.S. Senate
The Honorable John Duncan U.S. Senate
The Honorable Barbara Boxer, U.S. Senate

The Honorable Lynn Woolsey, U.S. House of Representatives
The Honorable Ellen Tauscher, U.S. House of Representatives
Lieutenant Colonel Timothy S. O'Rourke, District Engineer, U.S. Army Corps of Engineers
Lt. Gen. Robert B. Flowers, Chief of Engineers . U.S. Army Corps of Engineers

I-34 Friends of Novato Creek

General Response to Comment I-34 Regarding Remediation Issues at HAAF, Navy Ballfields, and SLC (NAF) sites (specific responses provided below):

The comment letter makes numerous references to remediation issues on the HAAF, Navy Ballfields, and SLC (also referred to as the North Antennae Field or NAF) sites. This general response discusses the relation of these issues to the activities included or not included with the BMKV expansion of HWRP, which is the subject of the SEIR/EIS.

The BMKV expansion is a proposed addition to the HWRP. The HWRP, including the HAAF, Navy Ballfields, and SLC (NAF) sites, were analyzed in the 1998 EIR/EIS and authorized in the Water Resources Development Act of 1999.

Relevant to HAAF/Navy Ballfields portions of the HWRP, as noted on pages 3-1 and 3-2 of the Draft SEIR/EIS, The suite of restoration activities in the 3 action alternatives include the following changes:

Replacement of the barrier levee between BMKV and HAAF, with an access berm for the NSD line
Extension of the Bay Trail south and north from the City of Novato levee
Potential use of diesel off-loading and booster pumps for off-loading dredged material
Potential alternative alignment of dredged-material pipeline directly from the off-loading facility to the BMKV expansion site (Alternatives 1 and 2)

None of the proposed changes included in the BMKV expansion result in any changes to the HWRP wetland design for the HAAF or Navy Ballfields parcels. The BMKV expansion makes no determinations whatsoever regarding potential remedial activities at the HAAF or Navy Ballfields. The BMKV expansion proposes no hydrologic or physical connections between the HAAF or Navy Ballfield parcels. Remedial determinations for these sites are being addressed through the BRAC process. If the remedial determinations ultimately made through BRAC would require changes in the wetland designs proposed for the HAAF or Navy Ballfields portions of the HWRP, then at that point, the lead agencies would evaluate the potential effects of the changes and determine whether or not additional NEPA/CEQA compliance would be necessary. This has been clarified in the executive summary, chapter 2, and the *Hazardous Materials and Waste* section of chapter 4 of the SEIR/EIS. At this point, the lead agencies consider it speculative to assume that the BRAC process would not result in remedial options that leave the site suitable for the proposed wetland use generally in accordance with present project design.

Extensive discussion of the HAAF and Navy Ballfields remedial issues in the BMKV expansion SEIR/EIS are not necessary for an adequate analysis of the effects of the proposed BMKV expansion. The summary of hazardous materials and waste relevant to the HAAF parcel and the Navy ball fields has been expanded somewhat so as to provide the reader with a contextual understanding of the remedial process at the neighboring parcels.

The SLC parcel was included in the 1998 EIS/EIR as part of the HWRP. Remedial issues at the SLC parcel are being addressed through the FUDS process. However, the only potential changes analyzed in the BMKV expansion SEIR/EIS relevant to the SLC site are, as noted, on pages 3-1 and 3-2:

- elimination of the proposed HWRP separating levee between SLC and BMKV;
- change in location and amount of high transitional marsh;
- repositioning of the tidal breach on SLC to BMKV (in Alternative 2 and 3); and
- reduction in the amount of dredged material placement (Alternative 3 only).

A summary of remedial concerns on the SLC site is presented in the *Hazardous Substances and Waste* section in chapter 4 of the Draft SEIR/EIS. The summary of hazardous materials and waste relevant to the SLC parcel has been expanded somewhat so as to provide the reader with a better contextual understanding. However, extensive discussion of remedial concerns on the SLC parcel is not necessary to adequately assess the impacts of the BMKV expansion, because the BMKV expansion presumes that the SLC site will be appropriately remediated to a state suitable for the proposed wetland use. Further, BMKV expansion makes no determinations regarding ultimate remedial options for contaminated portions of the SLC site, which are being determined through the FUDS program. If the remedial determinations ultimately made through BRAC would require changes in the wetland designs proposed for the SLC portions of the HWRP, then at that point, the lead agencies would evaluate the potential effects of the changes and determine whether or not additional NEPA/CEQA compliance would be necessary. This has been clarified in the executive summary, chapter 2, and the *Hazardous Substances and Waste* section of chapter 4 of the SEIR/EIS. At this point, the lead agencies consider it speculative to assume that the FUDS process will not result in remedial options that leave the site suitable for the proposed wetland use generally in accordance with present project design.

I-34.1

The hydrologic and hydraulic effects of the project on San Pablo Bay, Novato Creek, and Pacheco Pond are discussed in the *Surface-Water Hydrology and Tidal Hydraulic* section in chapter 4 and in appendix B of the Draft SEIR/EIS. These are the portions of the Novato Creek watershed potentially affected by the BMKV expansion. See further discussion of hydrologic and hydraulic studies in Master Responses 2, 6, and 7 relevant to Novato Creek and Pacheco Pond.

Reference to the "Outboard Tidal/Coastal Marsh parcel" may be either to an area on the HAAF parcel, and area on the SLC parcel or both. Remedial investigations and actions are addressed through the separate BRAC and FUDS remedial processes.

I-34.2

See General Response to Comment I-34 above.

While the HAAF parcel would be separated by the access road/berm for the NSD site, with the BMKV expansion there would be no separating levee between the SLC parcel (which is part of the authorized HWRP) and the BMKV expansion site.

The HWRP goals and objectives are those used for the BMKV expansion as described in the executive summary and in chapter 1 of the Draft SEIR/EIS. The alternatives analyzed in the document were designed to meet those goals and objectives, and the project sponsors believe that the BMKV expansion furthers the HWRP goals and objectives, which is why they are proposing to add the BMKV expansion to the HWRP.

I-34.3

See General Response to Comment I-34 above regarding HAAF and SLC.

The 1998 EIS/EIS discussed wetland restoration at HAAF.

The results of Phase I Environmental Assessment (Miller Pacific 1995) and the Shallow Soil Investigation (Erler & Kalinowski 2002) for the BMKV expansion site are summarized in the *Hazardous Substances and Waste* section in chapter 4 of the Draft SEIR/EIS. The results of prior studies at the SLC site are also summarized in the same section. Source documents for preparation of the summary information are cited. CEQA Guideline 15125(a) specifies that the description of the environmental setting for a project shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives.

I-34.4

As noted in the prior response, the results of prior hazardous waste studies for the BMKV expansion site are summarized in the Draft SEIR/EIS. It is presumed that the comment reference to "environmental assessment" refers to hazardous materials investigations, and these are summarized in the document for the BMKV and SLC sites. The actual studies are not included in the Draft SEIR/EIS, but the summaries of results are sufficient to characterize potential impacts for the reader of the document. These studies are included in the technical appendices to the GRR; however both NEPA and CEQA allow the incorporation of information from supporting technical studies by reference.

As noted in the prior response, this document is a supplemental EIR/EIS to the 1998 HWRP EIS/EIR and is limited to analyzing the new actions or changes actions relative to the BMKV expansion and does not reanalyze environmental effects of the HWRP where they are not changed by the proposed expansion.

The reference to Volume 11 is unclear. If this is a reference to Volume II of the GRR – this is an appendix to the GRR, not to the SEIR/EIS. Nevertheless, the information in the technical appendices was utilized and is referenced and summarized in the SEIR/EIS where relevant to the analysis of environmental effects.

I-34.5

On a physical level, the HAAF site and the BMKV expansion site would not be "co-mingled" as they would be separated by the NSD access road/berm, which would be a barrier to surface hydrological connection. Resolution of remedial issues at the HAAF site ispart of the BRAC process. Handling of potentially contaminated soils, including any potential use of borrow material at the HAAF site, the SLC site, or the BMKV expansion site must comply with state and federal laws and regulations. There is no plan to move soil from HAAF or SLC to BMKV.

I-34.6

Comment noted. The lead agencies believe that the SEIR/EIS is supported by sufficient and adequate technical studies, presents a realistic assessment of project effects and discusses relevant regulatory requirements. Property ownership is identified in both the GRR and the SEIR/EIS.

I-34.7

The Hamilton/BMKV project is designed to restore a diverse array of wetland habitat, using dredged material as a resource, where feasible. The environmental goals drive the project design and feasibility analysis, not dredged material disposal. The Port of Oakland is only proposed to provide a portion of the material to establish the restoration template. Material from the Port or any other source will be used only if it is determined to be suitable by the DMMO.

As noted on page 6-13 of the GRR, the Oakland Deepening Project Cooperation Agreement (PCA) assigned funding responsibility relevant to beneficial reuse of Port dredged material at the HWRP to the Deepening Project. Also as noted on page 6-13 because the Port's obligation is defined as a fraction of the total costs of the applicable components of the HWRP implementation costs, the adjusted HWRP implementation costs are expected to increase the funding contributions from the Deepening Project. Use of appropriate material and funding contributions from the Oakland Deepening Project are part of the assessment of feasibility. However, as noted in the GRR, the majority of project costs are to be funded by the HWRP and other navigation projects using the site. As noted in the GRR, the project is considered economically feasible

Environmental effects are discussed in the SEIR/EIS and where significant effects are identified, mitigation measures are proposed. It is the lead agencies determination that based on all of the information presented in the GRR and the SEIR/EIS, that the preferred alternative is feasible.

I-34.8

The HWRP/BMKV project is proposed to be funded as a federal/state project. No user fees are proposed. Therefore the economic viability of the project would not be impacted by dredged material sources that do not meet criteria for use in the project.

As noted above, the HWRP/BMKV project would only accept material determined to be suitable as wetland cover material by the DMMO. As described in the *Hazardous Substances and Waste* section in chapter 4, the DMMO, which is a consortium of regulatory agencies, evaluates dredged material and makes recommendations on its chemical suitability and biological suitability for use in wetlands and uplands based on testing that is specific to the proposed site environment, as well as on criteria and guidance from federal and state laws. Because dredged material would not be accepted from any source if it were not determined suitable for wetland cover, the project has an effective screening mechanism in place to monitor sediment quality. The DMMO will evaluate the suitability of material from dredging sources on a project-by-project basis.

Also as noted above, the project sponsors have determined that there are substantial amounts of appropriate dredged material from the Port of Oakland that can support the project in addition to substantial amounts of appropriate dredged material from other navigation projects.

I-34.9

The project sponsors do not believe that these goals are contradictory. The project design was guided towards a system that is simple and minimizes need for active management. For example, allowing natural sedimentation processes to create the final marsh plain by placing dredged material at a slightly lower elevation, rather than attempting to sculpt a final marsh plain prior to breaching. Another example

is the use of flapgates to drain nontidal areas, rather than maintaining pumps. However, the sponsors will monitor project development and use an adaptive management plan as needed.

As this is an expansion of the HWRP, the Monitoring and Adaptive Management Plan for the HWRP applies to the BMKV project. This plan has been updated to include the BMKV expansion and is included as an appendix to the Final SEIR/EIS. Responsibility for implementing the plan in the short-term will be assigned to the Conservancy and Corps. The Corps has adopted a 13-year monitoring period after completion of construction for this project. Responsibility for implementing the plan after the involvement of the Corps would be held by the Conservancy or its successor in interest.

I-34.10

Impact WQ-1 discusses the potential degradation of surface water and sediment quality due to increased methylmercury formation. As noted in the impact discussion, current research has identified that tidal wetlands and tidal wetland restoration may lead to increased concentrations of methylmercury in sediments and water; however, although models are being developed, it is not currently possible to estimate the methylmercury concentrations and bioaccumulation and biomagnification that may occur as a result of tidal wetlands restoration. The comment itself notes that the cited paper implicates tidal wetland restoration as "possibly" leading to increase concentrations of mercury, which is consistent with the description of impact in the Draft SEIR/EIS. Because mercury is a concern in San Francisco Bay, and mercury methylation in tidal wetlands is not sufficiently characterized by present science to complete a quantitative impact assessment, it was presumed that this impact is significant and unavoidable. Mitigation Measure WQ-1 is incorporated in the project to develop an adaptive management plan (including monitoring) in consultation with responsible regulatory agencies that would help guide project implementation and phasing in light of the scientific research being developed concerning mercury methylation.

Regarding dredged sediment monitoring, Impact WQ-9 discusses the potential for degradation of receiving water quality due to dredged material placement and identifies Mitigation Measure WQ-4 to develop and implement a water quality monitoring program for dredged material placement. The methylmercury adaptive management plan and the water quality monitoring program would reinforce each other in making choices about corrective actions regarding water quality, should they be determined to be necessary.

As noted in the Draft SEIR/EIS predictive modeling of methylmercury concentrations is not currently considered feasible, although models are currently in development. When appropriate models have been developed, then these models should be used as part of implementing Mitigation Measures WQ-1 . Specific mention of this has been added to the language of the mitigation measures.

I-34.11

See Master Response 1 regarding selection of the preferred alternative. The outboard levee has been moved to a location approximately 1,500 feet from the BMK south lagoon. This would increase the buffer zone as well as the upland component of the project. The preferred alternative is felt to contain an appropriate habitat design that fulfills the project's goal and objectives.

I-34.12

See Master Response 12 regarding habitat design. The project goals and objectives are the primary design criteria around which alternatives were developed and considered for analysis in the SEIR/EIS. One of the primary prior planning efforts, the Bayland Ecosystem Habitat Goals Report, was influential in establishing priorities for restoration in San Francisco Bay, and the project design was mindful of the recommendations of the Goals Report for a wide tidal marsh plain at the project area in addition to inclusion of diverse wetland and other wildlife habitat. As noted in the document, a wide range of alternatives was considered and is considered to represent a reasonable range of alternatives for consideration. These alternatives were then further evaluation for consideration of analysis in the Draft SEIR/EIS and were found to be a reasonable range for analysis. See further discussion of alternatives dismissed from further consideration in chapter 3.

As described in chapter 6, a series of technical and public workshops and meetings were conducted in the latter half of 2001 that were attended by agency representatives, consultants, interested parties, and members of the public to solicit input on the conceptual design elements for the BMKV expansion including hydrology, habitats, levees, trails, and access. In December 2001, a formal scoping meeting and scoping comment period were conducted to solicit further agency and public comment on alternatives and SEIR/EIS scoping. Only after the information developed through this process was considered, were alternatives fully developed.

Alternative 1 and 2, as described in the executive summary table ES-1 differ in the habitat design, number of tidal basins, routing of the Bay Trail, water management structures.

I-34.13

The FNC preferred alternative appears to include the following (as indicated in the comment): A swale of 2,000 feet in width; no breach to Novato Creek; conversion of Pacheco Pond to tidal marsh through introduction of tidal flow into the pond; interpretive center on City property at Hamilton; bay trail at some unspecified location, but not along Pacheco Pond.

This comment is noted. In the preferred alternative, the swale area has been modified to increase the width and allow for greater separation between the outboard levee and the south lagoon and greater upland habitat component. Regarding breaching the BMKV/Novato Creek levee, this is discussed in Master Response 6. Since the hydraulic analysis has not identified a significant adverse effect of the breach on Novato Creek, a breach has been included in the preferred alternative to restore the hydrologic and ecological connection of Novato Creek to its tidal floodplain. Regarding Pacheco Pond, the potential effects of a diversion of outflow are discussed in the Draft SEIR/EIS and in Master Response 7. Further, extension of tidal action to Pacheco Pond was considered (as Alternative Feature 11 – see chapter 3) but not analyzed further in the Draft SEIR/EIS due to impacts on existing pond habitats and loss of flood control function of the pond. The impacts of Bay Trail routings are discussed in the Draft SEIR/EIS. The City of Novato and Marin County have both included a trail around Pacheco Pond in their General Plan documents. The ABAG Bay Trail project also includes planning for such a trail.

I-34.14

As noted above, t<u>he Monitoring and Adaptive Management Plan for the HWRP applies to the BMKV project. This plan has been updated to include the BMKV expansion and is included as an appendix to</u>

the Final SEIR/EIS. Responsibility for implementing the plan in the short-term will be assigned to the Conservancy and Corps. The Corps has adopted a 13-year monitoring period after completion of construction for this project. Responsibility for implementing the plan after the involvement of the Corps would be the responsibility of the Conservancy or its successor in interest.

I-34.15

The *Water Quality* section of chapter 4 and the executive summary already identify the potential significant and unavoidable impact related to methylmercury. Mitigation Measure WQ-1 is included in table ES-2 in the summary and in chapter 4 to reduce this impact.

I-34.16

See response to comment I-34.12.

I-34.17

The purpose of an executive summary is to summarize the key conclusions of the SEIR/EIS, not to provide detailed analysis of all relevant issues. The SEIR/EIS presents the design parameters of the project concerning dredged material quality, presents the current RWQCB sediment screening criteria (see table 4-11), and describes the role of the DMMO in evaluating dredged material quality. The effects of using dredged material versus a natural sedimentation approach are evaluated throughout chapter 4 in the comparative analysis relevant to Alternatives 1 and 2 versus Alternative 3 (see in particular the *Water Quality* and *Hazardous Substances and Waste* sections). Where significant effects are identified, mitigations are proposed, such as those above concerning water quality monitoring of dredged material placement.

I-34.18

The purpose of an executive summary is to summarize the key conclusions of the SEIR/EIS, not to provide detailed analysis of all relevant issues. As noted in the General Response to Comment I-34 above, remedial issues at the HAAF and Navy Ballfields are are the subject of the BRAC remedial process. The Coastal Salt Marsh sites at HAAF are also being addressed by the BRAC program. Existing data on the SLC site and the BMKV site is summarized in the SEIR/EIS. The potential planning constraints regarding the SLC parcel are noted on page ES-13. The potential planning constraints related to HTRW on BMKV are discussed on page 2-20 ; as identified on page 2-20, any necessary remediation on BMKV is not expected to impact the addition of BMKV to the authorized HWRP.

I-34.19

Scoping for the SEIR/EIS is discussed in chapter 6. Specific issues raised during scoping, including hydrologic and other concerns are noted in chapter 6 and in the scoping report included in appendix G. Comment letters on the NOI/NOP are also included in appendix G. Input from the BMK CSD and other agencies, individuals, and organizations during the design workshops in fall 2001, during the formal scoping period, and in informal meetings subsequent to the scoping period were considered by the lead agencies during development of the alternatives and preparation of the SEIR/EIS. Where appropriate to support the impact assessment, supporting technical studies, such as concerning surface water hydrology and hydraulic modeling were conducted and are considered adequate for the purposes of impact assessment. Public Issues and Areas of Controversy were discussed on pages ES-8 and ES-9 in the Draft

SEIR/EIS; this section has been updated with information generated during the public comment period on the Draft SEIR/EIS.

I-34.20

Key prior reports concerning remedial issues at HAAF have been mentioned in the revised *Hazardous Substances and Waste* section in the Final SEIR/EIS. However, extensive description of remedial issues, as noted in General Response to Comment I-34 above is not necessary to characterize the environmental effects of the BMKV expansion.

I-34.21

The Outboard Marsh parcel is on the HAAF site and no actions included in the BMKV expansion would change the existing HWRP related to this location – thus it does not need to be included in the study area.

For the SEIR/EIS, project effects on Novato Creek, Pacheco Pond, Arroyo San Jose, and Pacheco Creek were assessed in issue areas where such off-site effects were identified to occur. Thus, the study area for the individual subject areas was broader than the expansion site itself in areas such as hydrology and tidal hydraulics and water quality. A note to this effect has been added to Section 2.2 of the GRR.

Regarding potential levee breaches, impacts are discussed in Master Response 6 and in the *Surface-Water Hydrology and Tidal Hydraulics* section of the Draft SEIR/EIS.

I-34.22

In the mid-1800s, the shoreline was located just east of the BMK residential area. The area west of the shoreline was tidal marsh and salt pond, including the current location of the BMK community, the western side of BMKV and Pacheco Pond. The comment is correct about the accretion of sediment due to hydraulic mining in the mid to late 1800s. These details have been added where appropriate in the GRR and the SEIR/EIS. Diking and draining of the site and use for dryland farming is noted in Section 2.3.2 and other portions of the text already. Current groundwater quality is described on page4-48 of the Draft SEIR/EIS.

Regarding alleged "bombing range" use, the Enhanced Preliminary Assessment (Weston, Roy Inc., *1990 Enhanced Preliminary Assessment, Hamilton Army Airfield, Novato California*) noted a "hearsay" report of possible bombing areas near the East Levee landfill, north of the aircraft parking areas, and in Bel Marin Keys (north of runway overrun) (Weston 1990). However, the Enhanced PA noted that "the use of any areas on or around Hamilton Army Airfield for bombing range activities could not be documented" (Weston 1990). The Enhanced PA recommended further investigation to verify the existence of any bombing ranges; if any documentation (such as written or first-hand verbal reports) of bombing ranges were located, the Enhanced PA recommended an ordnance sweeep of any such identified suspect areas (Weston 1990).

Record reviews were conducted subsequent to the Enhanced PA, but no evidence was found to substantiate the presence of the ranges (ETC 1994). Privately owned farmland to the north of the Hamilton Army Airfield was also inspected for the Community Environmental Response Facilitation Act Report (Earth Technology Corporation (ETC) 1994, *Community Environmental Response Facilitation Act Report, Hamilton Army Airfield*). Physical evidence or other records of bombing ranges were not

identified during the CERFA windshield, walk-through and aerial site surveys. The CERFA report concluded that the operation of a bombing range in areas used for farming and residences is atypical. The CERFA also report concluded that "the lack of substantiating documentation or physical evidence for the ranges identified in any of the site investigations conducted since the Enhanced PA, in conjunction with the unlikelihood of the site as a bombing range due to safety considerations, support the…conclusion that there never was a bombing range at Hamilton Army Airfield" (ETC 1994).

Regarding ordnance issues, the ASR makes no mention of ordnance uses adjacent to Hamilton. There is mention in the ASR (on p. 2-1) of "gunnery training"over Hamilton Field in 1933 by a squadron from Crissy Field, which the ASR judged to be strafing training. However this was conducted during construction of the airfield and it is unlikely that such activity could be conducted safely once the field was in use. The ASR did not identify use of the Hamilton site as a "bombing range" in its review of historical use and did not identify any bombing ranges as ordnance or explosive concerns in its conclusions and recommendations (USACE St. Louis 2001).

I-34.23

Section 2.3.4 concerns HTRW (Hazardous, Toxic, and Radiological Waste) related to the BMKV expansion site itself. See General Response to Comment I-34 above. The characterization of contamination issues on the BMKV expansion site is considered adequate for the purposes of NEPA/CEQA impact assessment.

I-34.24

Page 2-11 of the GRR describes the historical network of natural channels leading to Novato Creek consistent with that noted by the comment. It should be noted that the current outlet channel from Pacheco Pond to Novato Creek pre-dates Pacheco Pond itself and was likely installed as part of agricultural use of the Leveroni parcels.

See Master Response 7 regarding Pacheco Pond diversion. As noted in the master response, the baseline for impact assessment of the BMKV expansion are the conditions present today, not 1850. The condition today is that Pacheco Pond is not a tidal marsh and the MCFCWCD tidal flapgates prevent tidal intrusion into the pond.

The preferred alternative has been modified to retain use of the outlet to Novato Creek, at least for dry season outflow, and possibly for dual use with a new outlet to BMKV in the wet season. The preferred alternative is not expected to result in a change in habitats in Pacheco Pond itself.

Extension of tidal flow to Pacheco Pond was considered during alternative development (see Alternative Feature 11 in chapter 3 of the SEIR/EIS), but was rejected from further consideration because it would seriously hinder the flood control function of Pacheco Pond and would convert the existing brackish and riparian habitats in the pond and in the confluence of Arroyo San Jose and Pacheco Creek. Further, the pond is not owned by the Conservancy and it is unlikely that MCFCWCD, who owns the pond and operates under an agreement with DFG, would support conversion to a tidal marsh.

I-34.25

The BMKV expansion does not include any changes to the HWRP design for the seasonal wetlands on Hamilton. Hydrology for the expansion site itself and connections to adjacent water bodies are presented in the *Surface-Water Hydrology and Tidal Hydraulics* section of the Draft SEIR/EIS. Discussion of topographic features at the HAAF parcel is not provided because the BMKV expansion does not propose any changes to the wetland design at the HAAF parcel, which was the subject of the 1998 EIS/EIR.

I-34.26

The description on page 2-12 of the Draft GRR describes hydrology, not habitat. No statement is made about what elevation the pond is actually managed at – reference is only made to the operating agreement between MCFCWCD and DFG. No other specifics are provided in the comment concerning purported information being outdated.

I-34.27

No basis for the assertion that the 1996 top of levee surveys are "incorrect" or "outdated" is provided. The 1996 levee surveys are the most recent surveys available that surveyed the entire perimeter levees at the expansion site along Novato Creek, San Pablo Bay, HAAF, and Pacheco Pond. The lead agencies are unaware of any other, more recent survey that has examined the entire perimeter levees.

The cited pictures are identified as showing flooding of BMK Blvd and overtopping of the BMK lock. These locations are both outside the proposed restoration area and are not located on the BMKV perimeter levees. The discussion in Section 2.3.5.1 notes that the BMK community is susceptible to flooding during high tide stages

I-34.28

The referenced easement (Marin County Recorders Serial No. 97-000917) was executed in late 1996 and recorded in 1997 between the BMK CSD and California Quarter (the former owner of BMKV). The easement contains the following language: "The easement granted herein includes the following use of the Servient Tenement by Grantee…..c) the right to discharge water onto the Servient Tenement from the lagoon; provided that water from the lagoon shall only be discharged onto the Servient Tenement when the lagoon and Novato Creek reach a level of 1.5 feet NGVD." The Servient Tenement is defined as "a portion of Grantor's property" (Parcel 157-172-07) "and is more particularly described in Exhibit "A" attached." Exhibit "A" describes the "Bahama Reef Easement" as real property in Marin County, "containing 3.034 acres, more or less," and is noted on the attached map as the same acreage. There is no mention of the 300-acre MCFCWCD easement in the 1996 easement for the lagoon overflow. The 300-acre MCFCWCD easement is located on Parcels 157-172-08 and 157-172-38. <u>These details have been updated in the *Surface-Water Hydrology and Tidal Hydraulics* section of the Final SEIR/EIS.</u>

I-34.29

Re: flooding Although the potential exists, there is no evidence that stormwater flows have resulted in contaminant migration from HAAF to BMKV. Soils testing of ditches and fields on BMKV have revealed no elevated levels of contaminants of concern.

I-34.30

Section 2.3.6 of the GRR and the *Geology, Soils, and Seismicity* section of chapter 4 of the Draft SEIR/EIS describe site conditions relative to the BMKV expansion area. The summary information presented in the GRR and in the SEIR/EIS is based on the data in the Geotechnical Design Requirements in GRR Technical appendix C. Settlement impacts are described in Impact G-2 concerning wetland formation and levees. As noted in the discussion in this impact, detailed site-specific geotechnical investigations would be conducted to support the engineering design of levees and specifications for dredged material placement components. Site-specific design-level geotechnical investigations would include review of any locally available recent data on settling, such as at the NHP levee. As noted in the Draft SEIR/EIS, the results of the design-level geotechnical investigation would be incorporated into the construction plans for levees and dredged material placement and would adequately account for anticipated settlement and this impact is considered less than significant.

I-34.31

Section 2.4.2.1 is about the potential for delays in implementing portions of the HWRP on the HAAF and SLC parcels due to the time necessary to resolve HTRW remediation issues. This section is not about contamination issues present at HAAF, SLC, or BMKV. The *Hazardous Substances and Waste* section of the SEIR/EIS discusses contamination issues relevant to the actions included within the BMKV expansion. The *Water Quality* section of the SEIR/EIS discussed the current water quality status of San Pablo Bay and Novato Creek. Special status species are discussed in the *Biological Resources* section of the SEIR/EIS. The PDD is located on the HAAF and outside the area included in the BMKV expansion. Bay-wide impacts of contaminants on special-status species is outside the scope of the SEIR/EIS, which focuses on potential effects of the BMKV expansion on special-status species.

I-34.32

The alternatives analyzed in the Draft SEIR/EIS all include an array of wetland and other habitats. The preferred alternative, Revised Alternative 2 includes open water, seasonal wetland, upland, high transitional marsh, tidal marsh, tidal mudflat, and subtidal channel and the lead agencies have determined that this alternative best meets the identified project goals and objectives in relation to habitat components. These habitats would provide for threatened and endangered species as well as migratory and resident species. In addition, transition areas and high-tide refugia are included in the conceptual designs and the large increases in tidal marsh and adjacent habitats are expected to substantially benefit clapper rail, salt marsh harvest mouse, and other species.

The comment asserts that the habitat design mix should be different than that included in the alternatives and is noted. However, this comment concerns project outputs rather than the effects of the proposed project. Project alternatives included in the Draft SEIR/EIS and dismissed from further consideration (including varying habitat mixes, see Alternative 4 and others) are disclosed in chapter 3 of the Draft SEIR/EIS.

The comment about “contiguous” seems to assert that the separating levee should be entirely removed between HAAF and BMKV. This possibility was considered as Alternative Feature 12 (see page 3-41 of the Draft SEIR/EIS) and rejected from further consideration because of the need to accommodate the NSD pipeline and access to that pipeline. The 2 sites are immediately adjacent to each other, though in ultimate design they would not be hydrologically connected.

Predation of California clapper rails on salt marsh harvest mouse is not relevant to the impact assessment. Increase of habitat for both species would be expected to increase the population of both species. The comment would seem to assert that tidal marsh should be designed to somehow increase habitat for California clapper rail and increase habitat for the salt marsh harvest mouse without creating any opportunities for clapper rail predation. Since these habitats occur naturally adjacent to each other, predation, when it occurs, is part of the natural order.

I-34.33

The current HWRP design includes a separating levee between the HAAF/SLC areas with a final design height of 8 feet NGVD. Without the BMKV expansion, the expansion site itself would need to be protected from the introduced tidal regime on HAAF/SLC. This is described in appendix A of the Draft SEIR/EIS, which provides the relevant project description from the 1998 EIS/EIR for the HWRP. With the BMKV expansion, the SLC site can be integrated into the expansion site, and the levee/berm separating the tidal areas on the HAAF and expansion sites only needs to be sufficiently high to protect the NSD pipeline and NSD access. This would result in a cost savings.

I-34.34

See subsequent responses re: ES-11.

I-34.35

Project effects on threatened and endangered species are discussed in the *Biological Resources* section of the Draft SEIR/EIS. Where significant effects are identified to these species, mitigation measures are identified for significant effects, where feasible.

I-34.36

Regarding historic flooding and fate and transport of contaminants on HAAF, remediation issues at HAAF are being addressed through the BRAC remedial process.

Regarding acid-sulfate soils, impact WQ-9 on page 4-57 of the Draft SEIR/EIS discusses the potential for release of sulfuric acid. As discussed, with the channeling of drainage through water quality detention ponds prior to discharge would dilute the small amount of sulfuric acid that could be released to Novato Creek and San Pablo Bay and this impact is thus considered less than significant. Mitigation Measure WQ-4 includes a water quality monitoring program to be implemented in compliance with WDRs to be established in the site permit from SFRWQCB.

Hazardous materials and waste are discussed in chapter 4 of the SEIR/EIS based on the prior studies conducted on the BMKV and SLC sites. As noted above, remediation of contaminated areas of the SLC parcel is under the FUDS program. As noted in Mitigation Measure HAZ-1, site cleanup of areas of BMKV requiring remediation would be coordinated with DTSC, as well as SF RWQCB, and conducted in compliance with applicable state and federal regulations. Similarly, if any new, previously unknown areas of potential contamination were to be identified during restoration activities, state and federal regulations would apply to any potential remedial actions. The areas of potential concern on the BMKV and SLC site are described in tables 4-8 and 4-10. Overview figures of the areas of potential concern have been added as Figures 4-13 and 4-14 in the final SEIR/EIS for information purposes.

I-34.37

Section 2.5.6 references the guidelines and guidance to be used to determine dredged material suitability. Determinations of suitability would be made by the DMMO. As stated on page 3-16, the project would only accept material determined to be suitable for use at wetland cover by the DMMO. Sediment quality is discussed on pages 4-131 to 4-135 in the Draft SEIR/EIS related to dredging projects and wetland reuse of dredged material. RWQCB screening criteria are presented in table 4-11. This information adequately describes the method of screening material for potential use at the project.

I-34.38

Regarding alleged HAAF groundwater, HAAF storm drainage, and "base-wide" DDT issues, these are relevant to the HAAF parcel. Wetland restoration of the HAAF parcel itself is unchanged by the BMKV expansion and is the subject of the BRAC remedial process. Regarding potential release of contaminants, hazardous materials and waste are discussed in chapter 4 of the SEIR/EIS based on the prior studies conducted on the BMKV and SLC sites. As noted above, remediation of contaminated areas on the SLC parcel is under the FUDS program, which is described on page 2-9 of the Draft SEIR/EIS, and is presumed to be completed prior to wetland restoration activities associated with the BMKV expansion, as noted on page 2-1. As noted in Mitigation Measure HAZ-1, site cleanup of areas of BMKV requiring remediation would be coordinated with DTSC, as well as SFRWQCB, and conducted in compliance with applicable state and federal regulations. These actions are presumed to leave the site in a suitable conditions for wetland reuse.The comment appears to assert that episodic flooding has resulted in contaminant (such as DDTs) migration from Hamilton to BMKV through surficial flow. However, no evidence is provided to support this assertion. As stated on page 4-129 of the Draft SEIR/EIS, shallow soil sampling conducted in 1989 by Blymer Engineers, Inc., along the HAAF property boundary with BMKV and on the BMKV parcel was done to test for petroleum hydrocarbons and herbicides/pesticides with no detection of the tested compounds. Drainage ditches were later sampled by EKI, Inc. in 2000. No herbicides, pesticides, or phenols were detected in the samples collected from these ditches.

I-34.39

See Master Response 7 regarding Pacheco Pond diversion. Reference to "1987" map is probably a typo; reference is probably to mid-late 1800s or early 1900s mapping.

I-34.40

In the preferred alternative, there would be no spur to Novato Creek.

I-34.41

As noted above, remediation of the SLC site is being addressed separately through the FUDS process. The BMKV expansion makes no determinations regarding remedial options for contaminated areas on the SLC site. The BMKV expansion includes a high transitional marsh area on the southeast corner of the SLC site, which is a change from the 1998 project proposal for this area.

I-34.42

Contiguous means adjacent. The final sentence in Section 2.5.3 notes that the NSD access berm would create a hydrologic separation between the combined BMKV and SLC parcels and the HAAF parcel. This is described accurately in the GRR and the SEIR/EIS. However, study of large natural Bay tidal wetlands has identified that internal drainage divides arepresent within larger areas of contiguous wetlands.

I-34.43

See response to I-34.36 and Master Response 10.

I-34.44

Hazardous materials and waste are discussed in the *Hazardous Substances and Waste* section of the Draft SEIR/EIS on pages 4-126 through 4-139. The text and tables described the identified locations of contaminant concerns adequately and incorporate by reference the source prior technical studies, which include mapping. Table 4-9 on page 4-130 discusses the sampling of the BMK CSD dredged material placement area on the northeast corner of the BMKV expansion site.

I-34.45

See Master Response 2 and the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4 of the SEIR/EIS and appendix B of the SEIR/EIS.

I-34.46

As shown in table 3-2 in chapter 3 of the Draft SEIR/EIS and in table 4-7 in chapter 4 of the Draft SEIR/EIS, each of the alternatives analyzed would result in a net increase of wetlands overall compared to the existing setting. As described in the *Biological Resources* section of the Draft SEIR/EIS, in order to implement the conceptual design to create the targeted wetlands and other habitats, there would be an impact to existing habitats on the site. However, with project implementation, there is expected to be a substantial increase in wetland habitat on the site.

I-34.47

See the discussion of the Affected Environment and Environmental Consequences in chapter 4 for a discussion of environmental effects including those that may affect neighboring residential areas. Regarding Novato Creek, see Master Responses 6 and 7 and the *Surface-Water Hydrology and Tidal Hydraulics* section of the Draft SEIR/EIS.

I-34.48

See Master Responses 6 and 7. As discussed in the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4, the project is not expected to result in significant increased sediment deposition in Novato Creek. Also see the *Water Quality* section in chapter 4 of the Draft SEIR/EIS concerning potential runoff from the dredged material placement areas.

I-34.49

See Master Response 10 and responses above regarding dredged material sources and quality. As noted above, the wetland restoration design at the HAAF was the subject of the prior 1998 EIS/EIR. The BMKV expansion makes no changes to the wetland design on HAAF. See prior responses regarding result of prior studies regarding contaminated areas on BMKV and SLC and the *Hazardous Substances and Waste* section of the Draft SEIR/EIS. Regarding runoff see discussion of Impact WQ-9 and Mitigation Measure WQ-4 on pages 4-57 and 4-58 of the Draft SEIR/EIS. Regarding alleged bombing range use of BMKV and Pacheco Pond, see response above to comment I-34.22. The BMKV expansion makes no determinations regarding HAAF and SLC remediation, which are the subject of the BRAC and FUDS process.

I-34.50

The SLC parcel is a common and widely used reference to the subject parcel. The SLC parcel is already included in the HWRP, which was authorized in 1999. The BMKV expansion does not add the SLC parcel to the HWRP. The SLC parcel is discussed in context with the conceptual design of restoration activity on BMKV parcel due to the advantages from unifying the 2 sites and eliminating a separating levee segment. Remediation of the SLC site is the subject of the separate FUDS process. The BMKV expansion makes no determinations regarding SLC remediation, and the GRR and the SEIR/EIS both note that the remedial process at SLC must be completed prior to restoration activities. In addition, the preferred Alternative 2 (as revised) does not propose a channel cut across the area of concern at the SLC parcel. The SLC remedial process is currently at the feasibility/risk assessment phase.

I-34.51

See Master Response 7 regarding Pacheco Pond outflow diversion. Salmonid access is discussed in the Draft SEIR/EIS in chapter 4 under Impact BIO-9.

I-34.52

The SLC is already part of the HWRP, which was authorized in 1999. As noted on pages 3-24 and 3-25 of the Draft SEIR/EIS, the schedule for Alternative 2 (as well as the other alternatives) is dependent in part upon the completion of the FUDS remedial activities on certain portions of the SLC parcel. Until remedial activities are complete on the SLC site, placement of dredged material to create high tidal marsh in the southeast corner, and breaching of the outer levee for the southern cell of the tidal restoration area cannot be conducted. Other portions of the restoration activity, for instance in the northern cell of the tidal restoration or other parts of the BMKV expansion site could proceed in the interim while SLC remedial activities are completed.

Regarding responsibility for remediation, the HAAF parcel is the responsibility of the U.S. Army under the BRAC process, the Navy Ballfields parcel is the responsibility of the U.S. Navy under the BRAC process, the SLC/NAF parcel is the reponsibility of the Department of Defense under the FUDS process with the U.S. Army Corps of Engineers as the administering agency, and the BMKV parcel is the responsbility of the Coastal Conservancy as the owner.

I-34.53

Soils will not be moved from the HAAF or SLC parcels to the BMKV parcel.

Remedial issues and handling of contaminated soils at the HAAF parcel is the subject of the BRAC remedial process. Remedial issues and handling of contaminated soils at the SLC parcel is the subject of the FUDS process. Contaminated soils identified to date on the BMKV parcel are discussed in the *Hazardous Substances and Waste* section in chapter 4, and as noted in Mitigation Measure HAZ-1, site cleanup of identified areas would be coordinated with DTSC, as well as SF RWQCB, in compliance with applicable state and federal regulations. Handling, transportation, and disposal of contaminated soils would need to comply with applicable state and federal regulations.

I-34.54

As noted in Mitigation Measure HAZ-1, remedial actions would be coordinated with DTSC, as well as SF RWQCB, for any areas requiring remediation in light of the proposed reuse of the site. Remedial activities, as necessary, would be conducted prior to restoration activities. Site cleanup plans, determined in coordination with DTSC, would include any necessary controls to reduce migration of dust during remedial activities. It should be noted that the result of the prior site investigations for the BMKV expansion site have identified only limited soil contamination in discrete areas, not significant or wide-spread site contamination. Thus, the concern about soil handling is relevant to a relatively small portion of the site.

Regarding construction effects on air quality and noise, see the discussion of impacts and mitigation measures in the *Air Quality* and *Noise* sections of chapter 4.

I-34.55

Comment is unclear whether it is referring to HAAF, SLC, BMKV or all of the above. HAAF remedial activities are the subject of the BRAC remedial process. SLC activities are the subject of the FUDS remedial process. Potential remedial actions related to several limited areas of shallow soil contamination on the BMKV expansion site, would be coordinated with DTSC, as well as SF RWQCB, as noted in Mitigation Measure HAZ-1. Only after determinations through these separate processes that remedial activities have been completed suitable to the proposed wetland reuse, can dredged material placement take place.

As noted in Master Response 10, placed dredged material would have to be determined to be suitable for wetland cover use by the DMMO. It should be noted that due to subsidence, the expansion site is at an average elevation of –4 feet to –5 feet NGVD. Target elevations for areas of dredged material placement on the expansion site are 0 feet to 2 feet NGVD in the marsh basin, –1.5 feet NGVD at the deepest point of the swale, and about –1.5 feet NGVD in the seasonal wetland area.

As regard testing and permit requirement prior to water discharge into San Pablo Bay, see discussion under Impact WQ-9 and Mitigation Measure WQ-4 and general discussion in the *Water Quality* section in chapter 4 of the Draft SEIR/EIS.

I-34.56

The SLC parcel is already part of the authorized HWRP. The FUDS remedial process has not yet been completed. At this point, the project sponsors believe that it is speculative to assert that an appropriate remedial approach cannot be developed suitable to wetland reuse of the SLC parcel generally in accordance with the present project design. However, if at some future date, it were to be determined that

no feasible remedial option is available that would leave contaminated portions of the SLC parcel in a suitable state for the restoration activity envisioned in either the original 1998 SEIR/EIS or in the BMKV SEIR/EIS, then the project sponsors would need to develop modifications to the HWRP to allow the remainder of restoration activities to go forward. Since this is speculative at this time, it was not considered as an alternative in the prior EIR/EIS or the SEIR/EIS.

I-34.57

As noted on pg. 3-22 and 3-23, levee and internal peninsula construction activity in Alternative 2 is the same as described for Alternative 1, except the lengths and locations differ as shown in the construction approach figure (figure 3-7). See description of construction activity under Alternative 1 on pages 3-13 to 3-14.

Regarding internal levee stabilization, the specific engineering design of levees would be determined during the detailed design phase through additional site-specific geotechnical investigations.

Regarding channel creation, the design includes berms to separate the site into basins and internal peninsulas to favor sediment deposition, inhibit wave runup, and favor channel network formation. Pilot channels at each levee breach would be excavated to allow tidal intrusion. In the conceptual design, the marsh plain, including 2nd and 3rd order channels, would be restored through natural sedimentation and tidal action.

Regarding habitat diversity, chapter 3 identifies the expected habitats for the conceptual design of each alternative in the associated figures and tables.

Regarding reference sites for conceptual designs, the designs draw on the experience to date in the conceptual and detailed design of the HWRP, Sonoma Baylands, "Carl's Marsh" on the Petaluma River, and Muzzi Marsh as well as development of wetland designs for over 36,000 acres in the South and North San Francisco Bay as part of wetland mitigation assessment for the San Francisco Airport. However, it should also be noted that the designs for the HWRP and for the BMKV expansion are also based on assessment of existing and historic conditions in San Francisco Bay tidal marshes (including China Camp and Petaluma Marsh), hydrologic and hydraulic modeling of the existing conditions at the site itself, and potential future conditions, and the input of a technical advisory committee, stakeholders, and the public through the various workshop and public meetings associated with both projects.

I-34.58

The benefits of each alternative are the habitats to be created through each design, which are summarized by acreage in table 3-2, discussed in the executive summary, and noted where appropriate in the *Biological Resources* section in chapter 4. Other benefits are described in chapter 3, summarized in table 3-1 and include the extension of the Bay Trail and the spur trail. The importance of tidal wetlands, seasonal wetlands, and other habitats is not discussed at length in the document, but is discussed thoroughly in the Baylands Ecosystem Habitat Goals Report, which is noted as a key prior planning effort in chapter 2 of the Draft SEIR/EIS. Also, the *Biological Resources* section of the Draft SEIR/EIS notes some of the species that would benefit from the newly created and expanded habitats.

I-34.59

Comment noted. As noted above, site-specific geotechnical investigations to support final levee design and other earthworks design would be completed during the detailed design phase to follow. These investigations would take into account any recent experience in the immediate project area concerning settlement. Conceptual design has taken into account prior site and local data when selecting general levee heights on a conceptual level.

I-34.60

A noted above, the BMKV expansion does not include changes to the wetland restoration design at HAAF and only minor changes to the design at SLC (mostly related to additional dredged material in the southeast corner of the parcel). The assessment of geology, soils, and seismicity is appropriately based on the prior 1995 assessments of the BMKV parcel itself, which are referenced in chapter 4. It should be noted that the prior studies were conducted to support an assessment of the previously proposed residential/lagoon/multi-use project proposed at BMKV, which included substantial amounts of fill and improved levees. These studies are considered adequate for the purposes of impact assessment in the SEIR/EIS. It should also be noted that geological, soil, and seismicity conditions at the BMKV parcel, the SLC parcel and the low-lying non-filled portions of the HAAF parcel, in general., are highly similar, in that they are all located in areas of thick deposits of Bay Mud. Geology, soil, and seismicity at HAAF and SLC were assessed in the 1998 EIR/EIS. Finally, site-specific geotechnical investigations to support final levee design, other earthworks design, and dredged material placement would be completed during the detailed design phase to follow.

I-34.61

Table 1-1 in chapter 1 of the Draft SEIR/EIS identified that a permit from SF RWQCB pursuant to the Porter-Cologne Water Quality Control Act, including Waste Discharge Requirements, would be required for discharge of water. Table 1-1 also identified that BCDC and DFG would need to issue permits before any Bay or cetain waterway filling or dredging or creek alteration occurs and that an MOA from DFG would be required for state-listed species affected by the project and consultation with USFWS and NMFS regarding federally listed species affected by the project.

As noted above, remedial activities at HAAF are conducted under the BRAC remedial process, activities at SLC are conducted under the FUDS process, and remedial activities at BMKV would be conducted by the Conservancy in coordination with DTSC (as well as SF RWQCB). The BRAC remedial process is described in chapter 2 of the SEIR/EIS and is conducted by the Sacramento District of the Corps under contract to the U.S. Army in coordination with USEPA and DTSC. The FUDS remedial process is also described in chapter 2 and is also conducted by the Sacramento District of the Corps under contract to the U.S. Army as the administering federal agency in coordination with USEPA and DTSC (CORPS to confirm description). Cleanup of limited shallow soil contamination areas on BMKV itself would be conducted by the Conservancy in coordination with DTSC, as well as SFRWQCB.

Required remediation suitable to the proposed reuse of the sites is determined through the separate processes in accordance with applicable state and federal regulations. This is discussed in chapter 2 relative to BRAC and FUDS and in the *Hazardous Substances and Waste* section of chapter 4 in relation to the expansion site. As noted on page 4-137 the lead agencies are required to perform appropriate cleanup of all hazardous waste sites located on the BMKV expansion site, as well as on the SLC, and

HAAF sites in accordance with RCRA, CERCLA, CCR Title 26, and other applicable local, state, and federal regulations. All of the designs presume that remediation of the sites suitable to the proposed reuse would be conducted prior to restoration activities at any identified hazardous waste sites requiring remediation.

I-34.62

The *Water Quality* section of the Draft SEIR/EIS notes the reports in 2000 and 2001 of potential water quality problems in the pond included sulfides and fish kills (see page 4-47) and the possible relation to lack of aeration and circulation (see page4-48).

Regarding the potential to convert Pacheco Pond to a tidal marsh by introduction of tidal flow see Master Response 7. Master Response 7 also discusses potential effects of diversion of flow from the existing Pacheco Pond outlet on Novato Creek morphology, sedimentation, flow, and habitat. Water quality effects on Pacheco Pond are discussed under Impact WQ-8 on page 4-56. Water quality effects on salinity in Novato Creek are discussed under Impact WQ-7 on page 4-55.

As noted in Master Response 1, the preferred alternative does not envision closure of the Pacheco Pond outlet. Rather it envisions that flow in the dry season would be via the existing outlet and flow would not be diverted to BMKV. The invert of the overflow structure to the BMKV seasonal wetland would be set at approximately 1.5 feet, allowing continuance in the current pond management level established in the DFG-MCFCWCD agreement, not change in the pond levels. This is noted (and has been updated to reflect the preferred alternative changes) in Impact WQ-8. During the wet season, it is expected that the new water management plan would result in dual use of both outlets, as determined optimal for both flood control and wildlife habitat purposes.

I-34.63

Water quality conditions in Pacheco Pond, including the results of the RWQCB investigation of the potential water quality problems reported in 2000 and 2001, are described on pages 4-47 and 4-48 in the Draft SEIR/EIS. Text has been added to note that FNC has submitted a request to RWQCB to list Pacheco Pond as an impaired water body for both sediment and pathogens. Contact with San Francisco Regional Water Quality Board staff identified that the Board has reviewed the FNC request and submitted material and has determined that listing of Pacheco Pond as an impaired water body is not warranted at this time (Morre, pers. comm 2002).

I-34.64

As noted on pages 4-47 and 4-48, the Corps has completed extensive environmental investigations at the airfield and runways and discovered no evidence of MTBE or other contaminants migrating in the direction of Pacheco Pond. Investigation of reported water quality problems in 2000 and 2001 by the SF RWQCB did not identify an obvious pollution source for the reported problems. RWQCB identified slightly alkaline pH levels, but did not identify that they were high enough to adversely effect humans or wildlife. Further, RWQCB has not identified to date an apparent link between reported fish kills and sediment data received. RWQCB and County staff have suggested that lack of aeration and circulation combined with stormwater runoff may be causing periodic toxicity. To date, the evidence does not support the assertion by the comment that diversion of high flows (above 1.5 feet NGVD) to the

expansion site would result in spread or increase of contamination that would impair the wetland habitats proposed at the site.

In terms of water quality in the pond relative to potential problems related to circulation , algal growth, and dissolved oxygen, Mitigation Measure WQ-3 requires consideration of water quality concerns during preparation of the new Pacheco Pond water management plan. In order to do this, it is expected that available data on water quality and would be reviewed and the measure notes that additional studies of water quality and circulation may be necessary to support the development of the new management plan.

I-34.65

Information regarding County sediment sampling has been updated per information obtained from Marin County.

I-34.66

The comment asserts that the Archives Search Report (ASR), prepared by the U.S. Army Corps of Enginers in September, 2001 identified "hazardous material dump sites near Pacheco Pond" that have yet to be investigated. However, the ASR itself concludes (p. 2-1) that while "there is a potential for previously unidentified disposal areas to be present"…"the historical information review indicates that these areas would contain construction related debris" and "observations made during site inspection confirmed the presence of construction debris within the indentified areas." The ASR goes on to state that (p. 2-9), "the review of historical information related to the site revealed no areas of concern, in addition to those known HTRW sites." Thus the assertion of identification of new potential hazardous material sites is incorrect. The ASR also notes (p. 3-1) that "all previously documented HTRW sites are in various phases of cleanup and should continue as planned", and no additional assessment or other environmental actions were recommended.

Regarding potential further assessment of ASR sites, the Army has agreed to prepare a preliminary assessment work plan for any sites that the Army agrees that they require investigation (Keller, pers comm. 2002). However, at this time it is not known which sites, if any, may be determined to require investigation. As noted above, the ASR does not present any evidence to demonstrate identification of new potential hazardous material sites beyond those already being addressed under BRAC.

I-34.67

Hazardous materials and waste are discussed in chapter 4 of the SEIR/EIS based on the prior studies conducted on the BMKV and SLC sites. As noted above, remediation of contaminated areas at HAAF is under the BRAC program and remediation of contaminated areas of the SLC parcel is under the FUDS program. As noted in Mitigation Measure HAZ-1, site cleanup of areas of BMKV requiring remediation would be coordinated with DTSC, as well as SF RWQCB, and conducted in compliance with applicable state and federal regulations. Similarly, if any new, previously unknown areas of potential contamination were to be identified during restoration activities, state and federal regulations would apply to any potential remedial actions. The areas of potential concern on the BMKV and SLC site are described in tables 4-8 and 4-10. A map from the BMKV Shallow Soil Investigation study has been included in the Final SEIR/EIS, as well as a map of areas of concern on the SLC parcel. The additions of these maps has not changed the analysis in the Draft SEIR/EIS. Any assessment of risk factors, as necessary, would be conducted as part of the ongoing and subsequent remedial investigations.

I-34.68

Comment noted regarding request to change the name of the site. However, the reference to "BMKV" is reference to the most common name in use at present to refer to the physical site and location.

I-34.69

As a point of information, the cover photo is an artistic representation and is not based on a photo of Novato Creek. The comment is incorrect in its assertion that the Draft SEIR/EIS fails to assess the impacts of the project on Novato Creek, Pacheco Pond, or other parts of the Novato Creek watershed. See the discussion in the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4 and the hydrologic and hydraulic modeling in appendix B.

Deposition of sediment from further upstream due to natural forces in the Novato Creek watershed is not an effect of the proposed project. See Master Responses 6 and 7 regarding potential morphological effects of the proposed project from proposed levee breaching and diversion of Pacheco Pond outflow. These responses include discussion of project-related effects on sedimentation.

I-34.70

See Master Response 2 regarding flooding, Master Response 3 regarding Flood Zoning and MCFCWCD easements, Master Response 4 regarding the BMK south lagoon overflow and BMK CSD drainage agreements, and Master Response 5 regarding flood insurance.

I-34.71

See Master Response 2 regarding flooding which includes responses concerning modeling, data sources, and assumptions. See also Master Responses 6 and 7, which provide responses regarding potential changes in morphology of Novato Creek due to the proposed breach and due to potential diversion of Pacheco Pond outflow.

I-34.72

See Master Response 7 regarding the Pacheco Pond outflow, which includes discussion of historic routes of Arroyo San Jose, Pacheco Creek, and Novato Creek.

I-34.73

See Master Response 7 regarding the Pacheco Pond outflow, which includes discussion of salmonid access to Pacheco Pond and its tributaries. Also note that table 1-1 identifies that the Corps will consult with NMFS concerning project effects on listed federal species.

I-34.74

See Master Response 6 regarding the proposed levee breach and effects on morphology, which includes discussion of sedimentation, modeling, data sources, and assumptions.

I-34.75

See Master Response 6 regarding the proposed levee breach and effects on morphology. The estimates for morphological change is an estimate in the form of a range, which covers the different size of tidal cells in Alternatives 1 and 2 that both include a breach to Novato Creek. Alternative 3 has no breach to Novato Creek.

The reference to tidal cells are describing the tidal cells located on the BMKV and SLC parcels. These cells would be separate only by basin divides as described in chapter 3 and would not be separated by the NSD levee/berm which would separate the HAAF parcel from SLC and BMKV.

I-34.76

See Master Response 6 regarding the proposed levee beach, which discusses long and short-term sedimentation effects and morphological effects of the breach on Novato Creek. See Master Response 7 regarding the morphological effects of potential diversion of Pacheco Pond outlet flow on Novato Creek.

Regarding sediment from the upper watershed of Novato Creek being transported into the lower portion of Novato Creek, sediment transport from other portions of the watershed is not affected by the proposed project.

I-34.77

See Master Response 12 regarding existing wildlife habitat.

In the preferred alternative, the interpretive center would not be located on BMKV, but on City of Novato property at Hamilton.

I-34.78

See Master Response 17 regarding agriculture.

I-34.79

See Master Response 15 regarding mosquito breeding habitat. Also see Marin-Sonoma Mosquito and Vector Control District comment letter (L-6).

Contrary to the comment assertion, ponding does occur within the agricultural fields due to poor drainage. This is verified by the analysis in the wetland delineation conducted by LSA in 1997, which identified that observed ponding areas (both direct and via aerial photography review) in the agricultural fields varied from 0 to 675 acres depending on year (LSA 1997). Inadequate agricultural drainage can give rise to increased mosquito breeding habitat.

I-34.80

The Monitoring and Adaptive Management Plan from the HWRP has been updated to include the BMKV expansion. This is included as an appendix to the Final SEIR/EIS. This plan includes an extended 13-year post-construction monitoring period by the Corps and Conservancy. The Draft

SEIR/EIS identifies where significant effects have been identified related to the proposed project and identifies feasible mitigation measures to address the identified significant effects, as required by NEPA and CEQA. Funding for project implementation including the monitoring period is the responsibility of the project sponsors.

Comment Letter I-35

Marin Audubon Society Box 599

September 13, 2002

VIA FAX AND US MAIL

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RE: BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON RESTORATION PROJECT DEIR/EIS

Dear Mr. Gandesberry and Mr. Jolliffe:

The Marin Audubon Society appreciates the opportunity to submit these comments on the Draft Environmental Impact Report and Statement for the Bel Marin Keys Wetland Restoration Project. Our organization has a long history with this site having opposed various development projects over the last 20 years in an attempt to protect the sites resources values. Three of our members (including the author of this letter) censussed wildlife use of the Hamilton-Ammo Hill area including Pacheco Pond and Creek wetlands for the USFWS Diked Baylands Survey in the late 1980's and early 1990's, therefore we are knowledgeable about the site. We are also the recipient of Coastal Conservancy funding to complete the purchase of BMKV. As you will see our primary interest is in protecting the existing and to-be-restored habitat and ensuring that it is not degraded by access uses.

We agree that Alternative 2, the preferred alternative, is the environmentally preferable alternative except for the public access component. We are concerned about the protection of existing habitat functions and values of Pacheco Creek and Pacheco Pond. We are alarmed that this significant publically funded project with the most laudable goal of restoring tidal marsh habitat, that will have far-reaching benefits for the Bay and Estuary, would have design features that threaten the viability of those habitats. Virtually all of the access alternatives, with the possible exception of the existing levee, would have significant adverse impacts on the habitats and the wildlife that currently use the habitats and wildlife that is expected to use the restored wetland. As stated in the Habitat Goals report by the Goals project participants "It makes little sense to expend private or public funds to restore a site, only to have its biological functions compromised...." I-35.1

Purely and simply, the newly restored habitat will be significantly degraded and compromised by the proposed trail system. Claims that the impacts would be mitigated by various measures are not supported by any data or experience. The EIR/S must do a more thorough job of analyzing impacts and potential mitigation measures for access. Relocation of the trail alignments and removal of the spur trails must be included. In addition, the existing and historic biological setting, habitat goals and plans for the upland habitat need to be provided in more detail in order to evaluate benefits and potential impacts of the project.

Our specific comments and questions follow:

BIOLOGICAL RESOURCES

The BMKV site is a very large property located between and among other important habitats. Discuss the regional significance of this property and the habitat that will be created by the project.

San Francisco Bay is a major overwintering habitat for migratory shorebirds and waterfowl of the Pacific Flyway. Discuss the importance of the restored habitat for migratory species.

Pacheco Pond and Pacheco Creek: As referenced in several parts of the DEIR/S, but not noted in others, Pacheco Pond was constructed as mitigation for loss of the shallow fresh water repairman wetland on which the Ignacio Business Park was built. As such the project should make every effort to protect and to maximize the functions and values this mitigation wetland was intended to replace. Arroyo San Jose now runs along the edge of this business park and the western edge of Pacheco Pond borders this development. Pacheco Pond is managed jointly by the Department of Fish and Game, the County of Marin, the City of Novato and the Marin County Flood Control and Water Conservation District for flood control and wildlife habitat.

In order to evaluate the potential impacts of the proposed closure of the connection to Novato Creek and the connection with the newly restored wetland habitat, as shown in Alternative 1, it important to know the current functions and values of Pacheco Creek and of the upstream habitat resources. That discussion should at least include a description of Arroyo San Jose, Pacheco Creek in addition to Pacheco Pond: and the habitat values of these resources. During our years of censussing, we observed a wide variety of species use from shorebirds, long-legged waders, dabbling ducks and, during winter months, rafts of diving birds including Canvasback and Scaup would rest and feed in the pond. In its lower reaches, Arroyo San Jose is a densely vegetated stream that widens into a willow thicket as it enters Pacheco Pond. Fresh water wetlands exist between the Arroyo and Ammo Hill. We observed Salt Marsh Yellowthroat and Song Sparrow nesting in these wetlands every year. Between the area of fresh water wetland and the concrete section of the Creek, there is a wide floodplain/seasonal wetland on which Western Pond Turtle have been observed. Green Herons, an unusual species in the Bay Area. Their numbers are limited because of the lack of year-round riparian streams. They nest in the willows associated with Arroyo San Jose. I-35.2

Alternatives call for expanding Pacheco Pond and cutting-off water flow from Novato Creek. There is no clear analysis of the potential impacts of these activities on the creek and stream habitats. The EIR/S should:

• Describe the habitat that is expected to result from the proposed modifications. When it is expected that these changes in habitat would occur: five years, ten, twenty? Compare the target habitat functions and values with the habitats that exist now and that would be lost with these modifications. Would the habitat for any species be lost or significantly modified so that these I-35.3

species could no longer use these creeks and pond? Does the target habitat comply with the intent of the mitigation of Pacheco Pond? Would the resulting habitat be a shallow, fresh/brackish water pond? I-35.3 Con't.

• Would enlarging Pacheco Pond result in the spreading of the limited water supply from the watershed and reducing the amount of water that remain in the creeks and Pond during the summer. Would be the upstream extent of the impact? What impacts could reduced water supply have on the creek vegetation? I-35.4

Over the last several years there has been a significant die-off of willows in the area where Pacheco Creek meets Pacheco Pond. It is unclear whether this die-off was due to lack of water from blockage by Landfill 26, the access road constructed by the Corps (without environmental review we might add) or some other reason, but we are anxious that this kind of impact not be repeated.

• What are the potential adverse impacts of transferring the connection of Pacheco Creek/Pond to the Bay from Novato Creek to the new tidal marsh? Where was the historic connection of Pacheco Creek and wetlands to the Bay? I-35.5

• Would closing of the culvert from Novato Creek permanently block an historic route for salmon and steelhead? The DEIR/S dismisses the presence of salmon behind the Ignacio Safeway. The IS/R speculates that these were hatchery salmon, which is not relevant. Whether or not one agrees with stocking the estuary with hatchery salmon to compensate for lost population due to impact, salmonoids should be able to continue to find their way into creeks that supported spawning historically. What is the potential for salmon to use the new bay connections for each alternative? I-35.6

• Provide a more complete discussion of the potential impacts to scouring of Novato Creek if the connection is blocked? I-35.7

• Explain why the Pacheco Pond-Novato Creek connection could not be left in place and still allow some drainage into the newly restored wetland, if necessary. This reportedly is what occurs now. I-35.8

Our analysis indicated that the project would result in significant impacts because it would result in the following Threshold of Significance impacts (p 4-76):

- Fragmentation of wildlife habitats resulting from location of the access trail in all of the three locations.
- Substantial disturbance of wildlife resulting from human activities resulting from the location of the trails which would direct people to north of the habitats. I-35.9
- Wildlife of biologically important habitat for substantial periods which may increase mortality or reduce reproductive success. This would occur all around Pacheco Pond with the alternative access routes along the east, west and south side of the Pond.
- Disruption of natural wildlife movement corridors which would occur at the south end of

Pacheco Pond where a trail between the pond and the restored marsh would inhibit wildlife from moving between these habitats. I-35.9 Con't.

Upland/Seasonal wetland/Transition Zone-buffer habitat. There is insufficient description of the treatment of the upland/seasonal wetland component of the restoration. Describe the habitat target for the upland and seasonal wetland component of the restoration? What plant species will be planted in the upland? What species would be planted along the edge of the restored tidal marsh, inland of the new tidal marsh and along the seasonal wetland? I-35.10

Furthermore, several of the Project Objectives (page ES-3) have not been met. The project would not:

"...create and maintain wetland habitats that sustain viable wildlife populations...." The potential impacts of the access trails intruding into the habitats brings into question the viability of the restored habitats and the continued viability of Pacheco Pond. Also, the

"...include buffer areas along the upland perimeter of the project so wildlife would not be impacted by adjacent land uses." The upland perimeter of the project is an important part of the marsh habitat for special status species. Buffers along this area are actually "in" the habitat. Buffers in Alternative 3 are non-existent. I-35.11

"...to be compatible with adjacent land uses and wildlife habitats." The access trail are not compatible.

"...To provide for public access that is not compatible with the protection of resource values...." The proposed mitigation measures are not adequate to mitigate the adverse impacts of the project.

Our comments on proposed impacts and mitigation measures follow:

The sequence of militations and impacts is difficult to follow. Why do the numbers of the mitigation measures rarely match the impacts even initially? I-35.12

BIO 4/Mitigation 2. Potential Impacts to Salt Marsh Harvest Mice. Has trapping and removal ever been done successfully in other projects previously? I-35.13

BIO 5 /Mitigation Bio 3. Impacts to Clapper and Black Rails. The EIR/S should recommend measures to be taken should rails be found when construction equipment is operating during February 1 to July 31. What types of measures have been used on other projects to avoid impacts to Clapper and Black Rails found during construction? I-35.14

BIO 6/Mitigation 6. Bio San Pablo Song Sparrow Impacts As with above, avoidance is the best mitigation. How wide should the buffers around the nest sites or breeding territories be? I-35.15

Impact BIO 9. Anadromous Salmonid Impacts. Dismissing the passage of adult chinook salmon as hatchery strays that do not appear to be self sustaining runs is unacceptable. One of the reasons hatchery fish are added to the system is to mitigate for population losses of natural populations caused by the activities of people. The EIR/S should discuss the potential for salmonids to use the riparian system under each alternative, identify salmonid impacts as significant, and recommend mitigation measures to ensure fish passage could continue. I-35.16

Impact BIO 10/Mitigation 7. Special Status Species Impact from Management and Maintenance Activities. The mitigation for possible special status species mortality related to maintenance activities puts off mitigation measures for a future management and maintenance plan. More than the two stated elements need to be included in this plan. Identify the range that should be included? Avoidance of impacts is certainly the preferred measure in all cases. This planning should not be confined to agencies. The interested public should be able to participate. I-35.17

BIO 11. Loss of Refugia for Clapper Rail, Black Rail and Harvest Mice. Mitigation for the loss of refugia due to lowering of the perimeter levee is identified as an impact. It should be evaluated as a significant impact. Mitigation is suggested as being provided by the transition and upland habitat areas (page 4-82) at the upper elevations of the restored tidal marshes. Leaving portions of the perimeter levee in place would provide upland refugia for rails and SMHM whose territories are in the outer areas of the marsh. However, the upland areas created and the landward side would be of limited value as refugia with trails and people so close. Having the only safe refugia on the outer edge of the marsh is not adequate mitigation. In order to ensure adequate refugia, because rails and SMHM live throughout the marsh and cannot be expected to all gather along the outer levee, the trails should be moved away from the upland edge of the marsh and located elsewhere. I-35.18

Impact BIO 13. Increase in Suitable Nesting Habitat for Waterfowl. This discussion claims this as a beneficial impact because the development of undisturbed grassland and seasonal wetland is expected to increase nesting habitat. The grassland and upland areas cannot be claimed as expanded nesting habitat because it has not been demonstrated that they will be free enough from the impacts of people using the trails, to provide suitable nesting habitat . I-35.19

Impact BIO 14/Mitigation 8. Loss of Coastal Salt Marsh. The monitoring program sounds fine, however, the EIR/S should recommend that the agencies commit to taking any actions necessary to correct problems that are apparent with the restoring marsh. I-35.20

Impact BIO 15/Mitigation 9. Loss of Brackish Open Water Habitat and Brackish Marsh. Because Pacheco Pond already supplies this habitat type and because of the uncertainty about potential impacts of expanding Pacheco Pond, we do not see a pressing need to create this habitat type. We recommend that the existing condition of Pacheco Pond be retained as brackish open water habitat and marsh. The more important habitat need is for shallow seasonal wetlands. I-35.21

Impact BIO-16 Loss of Seasonal Wetlands. We see this as the important habitat type needing mitigation because the larger BMKV site now provides the functions and values provided by I-35.22

seasonal wetlands on the project site, and these will be lost. Therefore, we disagree with the DEIR/S analysis that the seasonal wetland loss is less-than-significant. The relative value discussion (page 4.8-7) does not address the functions served by seasonal wetlands. What habitat functions and values will these seasonal wetlands serve? Describe how the proposed seasonal wetlands for each alternative will provide shorebird and waterfowl refugia habitat, given the proposals for public access immediately adjacent. I-35.22 Con't.

Impact BIO 18 Loss of Grasslands. Grasslands on the site provide some shorebird refugia and roosting habitat because they are farmed and therefore they were available for shorebirds and other birds for a time, when they are unvegetated or minimally vegetated. This discussion indicates that some loss would be less than significant because the wetland loss would be offset by in-kind and out-of-kind replacement wetlands of higher quality. To ensure they would be superior the EIR/S must demonstrate the vegetative and other conditions, including freedom from impacts of people, of the proposed upland grasslands and buffers habitats would be superior. I-35.23

Impact BIO 19/Mitigation 8. Loss of Habitat for Clapper Rail, Black Rail and Salt Marsh Yellowthroat. This mitigation speaks to the monitoring that will be conducted to document the tidal marsh restoration. However, this mitigation is not adequate because it fails to discuss the inadequacy of the upland buffer/transition zone for these species. Habitat for Clapper and Black Rails and for SMHM is not just tidal marsh but the adjacent upland areas. Buffer/transition zones are essential because at very high tides these species must seek refuge in adjacent uplands and hide in vegetation to avoid predation by raptors. It is unclear whether these transition/refugia habitats will be suitable to provide this refugia function because of the impacts of people on the various paths and the inadequate discussion about vegetation. The EIR/S should address vegetation that will be planted. Planting along the restored marsh should be with species that will ensure high tide refuge habitat. Identify the species that will be planted. Mitigation 8 should recommend that actions be implemented (not just that "could" be implemented) if the restoration is nor proceeding as designed. I-35.24

Impact BIO-20/Mitigation 8 and 9. Temporary Loss of Nesting Habitat for San Pablo Song Sparrow. The potential loss of habitat for this species is magnified by the importance of the high marsh/transition zone for this species. Reliance on these habitats places Song Sparrows at greater risk of impact from nearby trails and presence of people. This impact is even more of a concern because the impacts will not necessarily be temporary. Provide information about the nature of the planting that will occur along the high marsh/transition zone. Reevaluate this analysis in terms of the public access trails, the use of which would cause significant interruption and harassment of the Song Sparrow. Mitigations 8 and 9 should not simply suggest remedial actions, it should recommend actions in accord with the primary purpose and goals of the project. I-35.25

Impact BIO 21 & 22. Impact to Raptors, Golden Eagle and Burrowing Owl. These discussions consider the loss of foraging and nesting habitat for these species to be less than significant because there would be replacement of upland habitat and this represents a small fraction of available habitat for Golden Eagle and Burrowing Owl in the region. This is an inaccurate analysis. Burrowing owl population are decline in the region and because there are many I-35.26

developments being proposed and developed in grasslands, this habitat is declining in the region as well. Also, Golden Eagle nest nearby and it is vital that they have foraging habitat nearby/

Furthermore, it is necessary to know the vegetative species that will be planted in the raptor habitat to assure the upland will continue to provide raptor nesting and foraging habitat. How will their ability to hunt continue with people on trails through the middle of the habitat as with Alternatives 1 and 2? These impacts should be considered significant until the design of the upland has been modified to clearly provide and protect raptor foraging and nesting habitat. I-35.26 Con't.

Impact BIO-23. Temporary Loss of Foraging Habitat for Wintering Waterfowl. This impact also relies on replacement of upland and seasonal wetlands to replace foraging habitat. As above, it is simply not clear how the upland and seasonal wetlands will be an adequate replacement of this habitat type with the close proximity of people on trails. Also, to evaluate the habitat benefits, it is necessary to know the vegetative species that will be planted to provide suitable habitat. I-35.27

Impact BIO-24 . Increase in Suitable Habitat for Migratory Shorebirds. We certainly agree with the analysis that the project will provide increased intertidal flat habitat and that this is beneficial. However, the discussion fails to recognize that shorebirds need a place to wait out high tides when they must leave mudflats because they are covered with water. The mudflats will be considerably reduced in value as a habitat if there is not a suitable and safe high tide refugia habitat nearby. So far high tide refuge is not ensured because of the close proximity of people. I-35.28

The EIR/S should describe how the seasonal wetlands will be designed to ensure high tide refugia habitat for migratory shorebirds? This will destroy the very characteristics that shorebirds need for high tide roosts - broad shallow ponded water with absent or minimal vegetation, so they can see avian predators coming.

Will any vegetation be planted in and/or around the perimeter of the seasonal wetland and adjacent upland? Identify plants species that will be planted.

Impact BIO-27/Mitigation 1 and 3. Disruption of Wildlife During Trail Construction. The discussion in the last paragraph page 4-92 identifies three alternatives for the northward extension of the bay trail, one of which is along existing roads, and this and the trail along the new levee would have little or no impacts to sensitive wildlife. However, there is no discussion of this option. I-35.29

The EIR/S should develop and present an alternative that locates the trail along City streets and another that locates the trail through the city property near landfill 26. It is not clear where this discussion if referring to. Show in a figure.

Impact BIO-28/Mitigation 1 and 3. Disruption of Sensitive Wildlife Due to Public Access. The discussion under this alternative discusses the trail impact study recently undertaken by BCDC, and minimizes the observations, among other things, by observing that only 8 of the 25 were field studies. The important message is that all of the studies found adverse impacts on wildlife I-35.30

from trail activity. Josselyn study found that wildlife use declines as human disturbance increased. We have to question the validity of the Bay Trail Study because at least one of the control sites is not [illegible] the study site.

Nine possible strategies to avoid or minimize impacts are listed; three of the strategies. or possible strategies, are components that would increase the convenience or safety of people users and would have little relevance (except for point access) to protecting wildlife. Our analysis of the remaining five is:

• Buffers- We can protect wildlife habitat although they must be sufficiently large to provide adequate distance and have appropriate vegetative characteristics to protect the adjacent habitat. It is also vital to recognize again that the upland adjacent to tidal marshes and other wetlands is an important component of marsh habitats because special status species use these uplands, often called transition zones, as refugia so the planning must assure adequate upland and buffer the upland transition zone. To be effective, people also may also need to be restricted from adjacent uplands/buffers by fencing or plantings, however, these have their own impacts.

• Boardwalks/bridges - While it is true that these structures do confine users, they more often than not lead to even more disturbance, because they are built over and through the actual riparian habitats, and over wetlands and would directing users into the very heart of the sensitive wetland habitats. Indeed, in this case the boardwalk would be directly over the waters of Pacheco Pond and the bridge would be directly through and over riparian habitat. I-35.31

• Overlook points - these are only effective if they result in avoidance of sensitive areas. The overlook points and other trails must be located away from the sensitive habitats.

• Seasonal Periodic closures - These may work but require enforcement. The main impediment is that there would be a very few times that a trail could be opened because most of the year is sensitive habitat. Unfortunately, the EIR/S failed to recognize the importance of tidal and seasonal habitats, not only nesting jabitat but for overwintering migrating and overwintering shorebirds and waterfowl.

• Use Restrictions - It is necessary to prohibit feeding, dog access etc. but this would not mitigate for people walking/jogging/biking etc. along the trails without dogs.

• We agree that all three access alternatives will impact wildlife, but we strongly disagree that Mitigation 11 would reduce the impacts to less-than-significant. Mitigation BIO-11 - Incorporate wildlife sensitive approaches to Bay Trail design and develop Mangement Plan. This is inadequate because none of the measures, either separately or together, would significantly reduce impacts. Timing of construction would not address the main issues of direct loss of habitat due to construction of the trail and the intrusive presence of people using the trails. Trail construction materials might make the trail nice for people but would still not reduce impacts of the presence of people.

• Use of vegetation, open space, fencing or other buffers. These measures might be beneficial but there is insufficient information provided to assure they would be effective in redueing or avoiding the impacts. The EIR/S should provide a detailed discussion covering: the width of the buffer and open space, vegetation, fencing, how the buffer/transition zone/adjacent upland habitats will be designed to provide for the needs of the species that the habitat is being designed to support, and how wildlife will be able to move unimpeded between and among habitats.

• Use of overlooks, point access and spur trails. We fail to see how these features will protect habitat unless they are used in combination with locating or limiting these features to avoid impacts to sensitive habitat. The DEIR/.S fails to provide sufficinet information to address these issues.

I-35.31 Con't.

• Segregation of trailheads, parking and staging areas from sensitive habitat. These features are fine, but they will not protect sensitive habitat and wildlife if the trail itself is located in or near wetlands and adjacent uplands.

Why are many of the strategies identified in BIO--28 not even included in mitigation BIO-11? Buffers, sasonal closures and use restrictions would provide additional, although not adequate, mitigation.

Finally, a trail management plan is promised. Development of a plan in the future is not adequate mitigation. The public has a right to know now what mitigation measures are being considered in order to evaluate their adequacy. The EIR should at least require that certain components and goals and standards be adhered to, the most important of which is locating the trails where they will not impact habitats or wildlife.

Impact BIO 29/Mitigation 12. Disruption of Sensitive Wildlife due to Public Access. It is hard to follow the discussion of aligoments. A trails map should be provided with clearer identification of sections that are being discussed. We are unclear where the grasslands adjacent to the southward extension are? Where would is the area (north and south) that will require wetlands be established north of the bay trail?

Is any buffer/transition habitat planned for adjacent to the existing levee? Although there is a wide slope, it is covered with rocks which do not provide adequate buffer/transition habitat. How would impacts of the use of the trail on wetland species be reduced?

I-35.32

Mitigation 12. Implement specific design and management mitigaiotn for north and south extensions. A trail design and management plan to be developed sometime in the future is not adequate mitigation. The EIR/S should specify how wide the buffers would be? Make specific recommendations to ensure they are adequately wide and vegetated to provide transition habitat and buffer adjacent uses. If buffers are provided and no fencing, what would prevent people from walking onto the habitat?

Who would enforce dog and vehicle restrictions? People in Marin are notorious for ignoring dog

and even lease law restrictions. People are already using the levee for dog walking?

As mentioned above, seasonal closures would have to include the periods migratory waterfowl and shorebirds are in the Bay Area and migrating through it. This would generally be August, for migrating shorebirds, through April. I-35.32 Con't.

Impact Bio-30. Predator Access. Red fox is the major predator of concern. It is unclear where features to slow wave fetch will be located. These can be a pathway for predator access. Discuss and show the location of any berm/levee features and demonstrate that predators cannot use them to access the marsh. I-35.33

Impact BIO-31. Potential Harm to Marine Mammals and Fish Due to Pile Driving and Offloading Facilities. Impacts to native fish that are not special status should also be considered a significant adverse impact. There is experience with this problem in the Bay. Discuss using the bubble devices that have been used in the Bay to reduce fish impacts. I-35.34

Alternative 1, Impact BIO-34: Disruption of Sensitive Wildlife due to Bay Trail and Spur 1 Option 1A. This discussion correctly identifies adverse impacts due to construction through the wetland/riparian areas at the confluence of Arroyo San Jose and Pacheco Creek. This would result in the permanent loss of approximately 4 acres of wetland/riparian habitat, impacts to Pacheco Pond with additional impacts to wetland/riparian habitat due to an approximately 200 foot (long?) Bridge, or maybe this is a boardwalk.

The impacts of Alternative 1 would be significant, even with mitigation of Mitigations 1, 3, 5 and 15, for the reasons stated in discussions above. Another alternative should be developed that locates the trail north along City streets or the City's parklands and the crossover the creek in a less environmentally damaging location. I-35.35

Mitigation BIO-16. Implement Specific Design Measures and Management Recommendations. For the reasons discussed below, this vague mitigation is not adequate to reduce the potential impact to less than significant. Contributing to future riparian restoration is not adequate mitigation. There is no evidence presented that this contribution would in any way offset the habitat and wildlife impacts resulting from slicing through the riparian and wetland habitats and fragmenting and disrupting and destroying habitats. Besides restoration would likely occur anyway. The remainder of the recommendations would not in any way offset the direct destruction of this habitat.

Even if constructed before marsh restoration occurs, Spur 1 will have significant adverse impacts Impacts will be significant from the use of the trail because of its location between the restored tidal marsh and the seasonal wetland habitat

BIO-35. Disruption of Sensitive Wildlife due to Public Access along Bay Trail Alternative 1. We agree that this alternative would be extremely destructive to the habitat. A trail along western edge of Pacheco Pond would be right next to habitat with no ability for buffer because I-35.36

there is no space. The idea of locating the trail on a walkway over the water is even more egregious because it would be over the pond/marsh habitat, precluding any wildlife from using the waters underneath and habitat in the immediate vicinity.

A much more benign cross over location would be further upstream in the location where the channel is currently lined with concrete. The EIR/S should develop two additional alternatives, that avoid the impact - in accord with CEQA guidelines - by location access upstream from the sensitive habitats and another that locates the access along city streets. As discussed below, the proposed mitigation measures are inadequate.

Mitigation 12. For the reason discussed above, this alternative would not reduce the impact to less-than-significant level.

Mitigation 16a. Implement specific design measures, Alternative 1. Provide a figure showing the proposed bridge and boardwalk over Pacheco Pond location, so the impacts can be adequately evaluated.

- bullet 1 the recommends placing physical buffers. This recommendation must be inaccurate because there would be no space for a buffer over the marsh or along a trail in this location.
- Prohibiting dogs and fishing would mitibate impacts from those uses, not from the frequent presence of walkers, joggers, bikers and the like.
- Seasonal Closures during breeding season would not adequately mitigate the impacts on migratory waterfowl and shorebirds that depend on the Pacheco Pond habitat during fall, winter and spring months. In addition, the feasibility of this recommendation it is not clear because the enforcement agency is not identified.

I-35.36 Con't.

Question for all Spurs: it is unclear to us why a trail needs to be directed out to the Bay through the new wetland. Why can't a trail travel along the existing levee, which will be the edge of the Bay, and then turn west through the City's park property?

Mitigation 16b Implement Specific Design Measures for Spur 1A. A 300 foot buffer is fine. However, iIn and in accord with the Goals Report recommendations for wildlife, the discussion fails to recognize and discuss the obvious impact of fragmentation of tidal and seasonal wetland habitats by the trail located between the two. This impact must be identified as significant and adequate mitigation addressed.

The mitigation of placing the trail on the northern slope might reduce impacts to the restored tidal wetland, but it would increase impacts to Pacheco Pond. Identify this as a significant adverse impact, and identify and discuss measures to mitigate these impacts. The first mitigation considered should be avoidance of the impacts by not including a trail in this location. Placing physical buffers/barriers would simply serve to block access of wildlife other than birds from moving between the tidal wetland and seasonal wetland habitats. Or maybe someone has thought of a mitigation for that.

Signage is nice and should educate people but cannot be depended on to avoid or signficaintly

reduce impacts to wildlife because people ignore signs on every trail we have seen in Marin County.

Monitoring is fine, but the mitigation has no follow through requirement should impacts be identified. I-35.36 Con't.

See above discussion for ineffectiveness of seasonal closures, dog and fishing prohibitions.

Impacts and Mitigations Bio-36/Mitigation 36 for Alternativ2 Trail and Spur Option 2. Spur 2A would have the same and worse impacts as Spur 1 because this spur is located not only between the tidal wetland and seasonal wetland, but between the seasonal wetland and other seasonal wetlands. In other words, it bisects and fragments more habitats restricting use of more habitats by wildlife. I-35.37

Impact BIO-37 Disruption of Sensitive Wildlife due to Bay Trail Access Alternative 2 and Spur 2A. As discussed above, physical buffers/barriers, where appropriate and necessary, would simply block movement of wildlife other than birds and it is not clear that they would mitigate the impact of people. What barriers/buffers would be used? Where would they be used? Define where they would be appropriate and necessary?

Locating the trail on the northern slope between between Pacheco Pond and restored marsh will fragment habitats, interfere with or block wildlife movement between habitats particularly for non-avian wildlife, but even birds could be impeded. I-35.38

Gated access to the NSD road would not mitigate for wildlife impacts. Prohibiting dogs and fish ing would mitigate against those uses, not the presence of walkers, joggers, bikers etc. Develop an alternative that does not include this spur.

Mitigation 17b This mitigation is inadequate for this impact for the same reasons noted above See and address our comments for 16b for this impact.

Impact BIO-39 Disruption of Wildlife due to Access for Alternative 3. The access impacts of this alternative on the restored tidal marsh habitat and species would be even more significant than for the other alternatives along the length of the Spur because is space for a to be much space for a buffer. What width buffer would be provided? I-35.39
The Mitigations identified in 8a and b are identified in other alternatves and the above discussions apply to Alternative 3.

INTERPRETIVE CENTER

Clarify why an interpretive center is being planned for construction. I-35.40

Discuss the potential adverse impacts and benefits of the proposed center in the two proposed locations. The BMK Blvd. Location would be away from the main area of the restoration and

would, contrary to the statement in the DEIS/R attract large numbers of people to any trails in the eastern corridor. The site shown on the Hamilton parcel would require an access road, parking, and would bring many people out to the habitat area.

Why couldn't an interpretive center be located on the former Hamilton base where there are existing buildings, roads and other infrastructure? Or how about planning as part of the City's park? Evaluate locating the center in an existing building at Hamilton. There seem to be several vacant hangar still remaining. I-35.40 Con't.

What other location alternatives were considered for the center, and why were they rejected? It seems to us that there are a number of other potential loctions in already developed areas

OTHER QUESTIONS:

Discuss the potential impacts of anticipated global warming and climate change on the restored wetlands and associated habitats. I-35.41

Why is the offloading facility in the Bay located so far to the south (figure 3-4)? Why is it not located directly east of the offloading facility, which it appears would be a shorter distance? I-35.42

IN CONCLUSION

This is a wonderful project with unusual cooperation between industry and the environmental community that will provide significant benefits for the Bay ecosystem. Yet it stands to be degraded and diminished in habitat value by the public access component. The public access is in conflict with the state goals of the project, exceed the criteria for significance, and would result in significant impacts as defined in criteria for significance and should be changed to an alternative that eliminates adverse environmental impacts. I-35.43

Thank you for your help.

Sincerely,

Barbara Salzman

I-35 Marin Audubon Society

General Response to Comment I-35

This comment letter questions in numerous comments the significance conclusion and mitigation measure adequacy regarding potential impacts of public access on biological resources. Specific responses are noted below, as appropriate, for individual comments. This general response discusses broader approaches to considerations of impact assessment in the context of this project.

This is a restoration project that, as stated in the document, would result in substantial increases, particularly in the amount of seasonal wetland and tidal wetland acreages on the existing expansion site (see table 4-7). The preferred alternative, Revised Alternative 2, would include an increase of over 160 acres of seasonal wetland and nearly 900 acres of tidal wetlands, compared to the existing setting. These are beneficial outputs of the project. In the assessment of access-related impacts in the *Biological Resources* section of chapter 4, the provision of the increase in wetland habitats (and associated values) was not specifically mentioned in the Draft SEIR/EIS. It was presumed that it was understood that the analysis of these impacts, like analysis of other biological impacts, was done in the context of the restoration alternatives described in chapter 3. The provision of increases in seasonal wetland and tidal wetlands (and other habitat components) is part of the proposed project and is not considered mitigation. However, it was taken into account when determining significance of biological effects. The discussion of access impacts in the *Biological Resources* section has been updated to more clearly identify the proper context used for analysis, which includes the provision of increased wetland habitat on the site.

In addition, many of the comments about access in this letter presume a future baseline rather than a present baseline for analysis. The existing habitats on the site, described in the *Biological Resources* section in chapter 4, are the baseline for the assessment of impact and conclusions about significance. This is described on pages 4-1 and 4-2 of chapter 4, but has been updated to provide a more detailed description of the baseline used for analysis.

As is normal in the analysis of a restoration project, sometimes the discussion will include considerations of project features or measures to further implement the project goals and objectives which include "creating public access compatible with protection of resource values", and "creating and maintaining wetland habitats with viable wildlife populations", among other objectives. However, the inclusion of such featuress, such as the incorporation of design and management recommendations for the Bay Trail, does not change the baseline for impact analysis, which is the habitat that exists at present.

The lead agencies agree with certain comments provided by the Marin Audubon Society that an understanding of the regional context of the San Francisco Bay ecosystem is necessary to understand the potential benefits of the habitats proposed for restoration. The regional importance of restoration is discussed in many of the precedent planning efforts that are mentioned in chapter 2, primary among them is the Bayland Ecosystem Habitat Goals Report. To assist in the understanding of the benefits of the proposed habitat components of the project, additional background concerning the values of the proposed habitat components, additional discussion has been added to the *Purpose and Need* section in chapter 2 and in the existing setting of the *Biological Resources* section in chapter 4.

Numerous comments in this comment letter call for deletion of spur trails to Novato Creek and the removal of any extension of the Bay Trail across the BMKV property or around the west wide of Pacheco Pond. These comments are noted. It should also be noted that as described in Master Response 1, some features of Alternative 2 (the preferred alternative) have been modified since publication of the Draft SEIR/EIS. Specifically, the spur trail has been deleted, in part, to reduce the potential for adverse public access impacts on existing habitats and to further the project objective of creating and maintaining wetland habitats with viable wildlife populations. In addition, as described in Master Response 13, the Bay Trail has been routed around the east side of Pacheco Pond which avoids disruption to the existing willow riparian habitat at the confluence of Arroyo San Jose and Pacheco Creeks, allows for buffering between the trail and Pacheco Pond, and reduces additional construction disruption by averting the bridges and boardwalks necessary to route around west of the pond.

The project sponsors believe that the preferred alternative provides for public access and the Bay Trail while providing habitat as part of the project. The public access trail will be aligned along the southern and western perimeter of the restoration site and the majority of the restored wetlands will be remote from access alignments

I-35.1

See General Response to Comment I-35 above.

The project sponsors do not agree that the restored habitat will be significantly degraded, nor that the public access alignments would have significant unmitigated adverse impacts on existing habitat. Further, the proposed access components, with development of the final design and trail management elements in concert with appropriate agencies, is not expected to result in degradation of future habitats to be restored on the site. The Biological Resources section in Chapter 4 of the SEIR/EIS analyzes the potential impacts of the proposed public access on habitat.

The discussion of biological setting is provided on pages 4-64 through 4-74. Project goals and objectives, as well as related local, regional, and national planning efforts are described on pages 2-3 through 2-10 of the SEIR/EIS, and in Master Response 11 concerning habitat design. The CEQA Guidelines Section 15163 (b) provides that a supplemental EIR "need contain only the information necessary to make the previous EIR adequate for the project as revised."

I-35.2

Regarding Pacheco Pond, the preferred alternative includes a number of features relative to the functions and values of the existing Pacheco Pond. First, the project includes a 21-acre expansion of the pond and 1 12-acre area of emergent marsh to expand the habitat value of the pond and available open water and fringing marsh to support the existing species utilizing these areas of the existing pond. The preferred alternative does not include a Bay Trail along the western side of Pacheco Pond, as described in Alternative 1 because such as trail would disturb the willow riparian area at the confluence of Pacheco Creek and Arroyo San Jose, and such a trail would be directly adjacent to the Pond without any opportunity for buffering.

The biological setting of Pacheco Pond is described in the Draft SEIR/EIS on pages 4-70 and 4-71. The setting has been updated to add the observations noted in the comment.

I-35.3

Pages 3-32 through 3-34 describe, and table 3-6 compares, the features of the alternatives. For each alternative, period to construct, acreage of various habitat. Figure 3-11 provides the tidal habitat evolution for each alternative over time. Table 3-2 shows the estimated habitat acreages (upon maturity) for each alternative.

Regarding Pacheco Pond specifically, the preferred alternative is not expected to result in changes to existing habitats in the pond itself. The expansion of the pond is actually expected to increase the habitat value of the pond. The outlet to the seasonal wetland area would be set at an elevation (expected to be around 1.5 feet NGVD) consistent with the current MCFCWCD-DFG agreement for pond management. The project includes development of a new water management plan to determine the optimal dual use parameters for use of the existing and new outlet from Pacheco Pond. An impact discussion regarding potential changes in Pacheco Pond habitats has been added to the *Biological Resources* section; however this impact is determined to be less than significant for the reasons noted above.

Regarding effects on Novato Creek related to potential Pacheco Pond outlet flow diversion, see Master Response 7.

I-35.4

See Master Response 7 regarding potential diversion of Pacheco Pond outlet flow. Because the existing outlet would be in dual use with the new outlet and the BMKV seasonal wetland area does not require the dry season water, flow during the the dry season months through the existing outlet would be similar to current flows. The outflow diversion is proposed to provide a source of wet season high-stage flow to support seasonal wetlands at BMKV. The design and the outcome of the new water management plan are expected to avoid any significant impacts to water levels in the dry season or existing habitats.

The comment on willows is noted.

I-35.5

See Master Response 7 regarding Pacheco Pond outflow diversion, which includes discussion of impacts and historic routes of Pacheco Creek/Arroyo San Jose.

I-35.6

As described in Master Response 1 concerning the preferred alternative, the existing outlet from Pacheco Pond to Novato Creek would remain in the preferred alternative in dual use with the new outlet to BMKV. As discussed in Impact BIO-9 (page 4-81 of Draft SEIR/EIS), the existing tidal flapgates severely hinder salmonid access at present. This is the baseline against which project effects must be evaluated under NEPA and CEQA. Because the outlet would remain in use and it is doubtful that the chinook sighted in 2001 were listed species or constitute a self-sustaining run, the effect of diversion of high flow in wet season months is not considered a significant effect of the project. Because this has not been identified as a significant effect, no mitigation for this effect is proposed. The outlets via BMKV and the tidal marsh restoration area have not been designed to allow fish passage. Although the impact does not require mitigation (because the impact is not determined to be significant), the Draft SEIR/EIS suggests consideration of potential fish passage in development of the new water management plan.

It should be noted that the project would provide additional substantial acreages of rearing habitat in the subtidal channels in the tidal marsh for juvenile steelhead and potentially other salmonids from other tributaries of San Pablo Bay and surrounding parts of the Bay.

I-35.7

See Master Response 7 Pacheco Pond outflow diversion, which discussed morphological effects on Novato Creek.

I-35.8

As described in Master Response 1 concerning the preferred alternative, the existing outlet from Pacheco Pond to Novato Creek would remain in the preferred alternative and dual use parameters would be developed in the new water management plan.

I-35.9

The potential biological resource impacts from access trails and from human activities are identified in the SEIR/EIS on pages 4-77 through 4-107. Mitigation is proposed on these same pages to reduce identified impacts related to trail routing to a less-than-significant level.

Also see General Response to Comment I-35 above.

I-35.10

The seasonal wetland and upland habitats are shown in chapter 3 and the acreages are identified. Also see Master Response 11 regarding habitat design. No seeding or planting is proposed in the tidal restoration area as the conceptual design calls for natural sedimentation to provide the final cover material for these areas. This material, from Novato Creek and San Pablo Bay would carry the seed material for eventual colonization of the site by vegetation found in nearby tidal marsh areas. As noted on page 3-17, seeding or planting of non-tidal habitats may be conducted as necessary. Detailed design and consideration of potential seeding and planting for the non-tidal areas would be conducted during the detailed design phase.

As noted on page 3-17, seeding or planting of non-tidal habitats (e.g., seasonal wetland, upland, high transition marsh) would be conducted as necessary. It is anticipated that selected upland habitat areas would be hydroseeded with a native grassland seed mix following the placement of fill material to control erosion. Any additional planting requirements (e.g., planting mix and methodology) for the site will be determined during the detailed design phase of the project. However, it is anticipated that the habitat areas will include the following species commonly found in these habitat zones; many of these species will likely colonize the site following the breaching of the outboard levees, and through overflow from Pacheco Pond and the Bel Marin Keys South Lagoon.

Upland Habitat Area: native annual and perennial herbaceous (e.g., wild rye, needlegrass, fescue, tarweed, lupine) and shrub (e.g., coyote brush) species; moist areas may also support sedges, rushes, and moist grassland species (e.g., blue-eyed grass).

Seasonal Wetland Habitat Area: rushes (*Juncus* spp.), sedges (*Carex* spp.), and grasses (e.g., creeping wild rye); more saline areas may support salt grass, pickleweed and other mid-high marsh species; areas subject to more frequent ponding may also support cattails and bulrushes.

High Transition Marsh Habitat Area: pickleweed and peripheral halophytes (e.g., saltgrass, fat hen, alkalai heath, jaumea, gum plant).

The need for any supplemental planting in these habitat areas will be determined based on the results of the post-restoration vegetation monitoring program.

I-35.11

See General Response to Comment I-35 above. Also see Master Response 13 regarding Bay Trail routing, trail spurs, BMK south lagoon use, and dogs for analysis concerning the impacts of the Bay Trail; and Master Response 11 regarding habitat design, which addresses concerns about type and amount of habitat restored.

Issues concerning Pacheco Pond are addressed in Master Response 7 and in the above response to comment I-35.3.

Based on the analysis in Draft and Final SEIR/EIS, the lead agencies have determined that the preferred alternative does meet the project objectives cited by the comment because of the inclusion of mitigation concerning access impacts, the inclusion of buffer areas south of the BMK lagoon, the trail routing, and the other features discussed in the executive summary and throughout chapter 4.

I-35.12

Each impact and mitigation measure is given a discrete sequential number for tracking purposes (e.g. in the mitigation monitoring program, in the findings document). All potential impacts are identified. If the impacts are less than significant, then no mitigation measure will be listed. In general, there will be more impacts than mitigation measures (although some impacts may have more than one mitigation measure).

I-35.13

See DFG Comment S-1.3 and response to Comment S-1.3 above. Pursuant to the comment, the mitigation measure has been changed as recommended by DFG to delete trapping and removal.

I-35.14

The specific measures to be taken if construction equipment must be located in the marsh during February 1 to July 31, and if a subsequent survey identifies the presence of clapper rail and black rails, would be determined at the time in consultation with USFWS and DFG (page 4-79 and 4-80). The mitigation measure overall reads “avoid operation of equipment in the outboard tidal coastal marsh” during rail breeding season. It is possible that no construction would be allowed by USFWS or DFG during the breeding season. The possibility is noted because the sponsors want to discuss with DFG and USFWS (during consultation) if there are any scenarios under which operation during the breeding season might be allowed.

I-35.15

The buffer width would be determined in consultation with DFG at the time of construction, as the actual width could vary depending on the construction requirements and specifics of the active nest site or breeding territory parameters (page 4-80).

I-35.16

As described in Master Response 1 concerning the preferred alternative, the existing outlet from Pacheco Pond to Novato Creek would remain in the preferred alternative in dual use with the new outlet to BMKV. As discussed in Impact BIO-9 (page 4-81 of Draft SEIR/EIS), the existing tidal flapgates severely hinder salmonid access at present. This is the baseline against which project effects must be evaluated under NEPA and CEQA. Because the outlet would remain in use and it is doubtful that the chinook sighted in 2001 were listed species or constitute a self-sustaining run, the effect of diversion of high flow in wet season months is not considered a significant effect of the project. Because this has not been identified as a significant effect, no mitigation for this effect is proposed. It should be noted that the project would provide additional substantial acreages of rearing habitat in the subtidal channels in the tidal marsh for juvenile steelhead and potentially other salmonids from other tributaries of San Pablo Bay and surrounding parts of the Bay.

I-35.17

Monitoring and adaptive management activities may result in potential effects on special-status species (page 4-82). In order to minimize these effects, the project proponent would coordinate with USFWS, NMFS, and DFG to develop a monitoring and adaptive management program that would utilize Best Management Practices (BMPs). As this program would be designed based on the detailed design process, it is speculative to describe the exact nature and type of practices at this time. The program would be designed to minimize effects, including scheduling activities around sensitive time periods for the various species. The comment regarding public involvement is noted.

I-35.18

The project sponsors agree that leaving portions of the outboard levee as refugia will mitigate impacts to rails and harvest mice whose territories encompass the outboard levee. The commenter may be under the impression that no upland refugia would remain along the lowered perimeter levee. Impact BIO-11 (page 4-83, states that such areas will be included in the design. As described in Master Response 1 concerning the preferred alternative, the spur trail has been deleted, a portion of the Bay Trail has been routed around the west side of Headquarters Hill, and the spur trail has been relocated to the City of Novato property. These changes would move access far away from the tidal restoration areas of BMKV and thus access effects on the new refugia locations would be averted. For these reasons, Impact BIO-11 concludes that this impact is less than significant.

I-35.19

As described in Master Response 1 concerning the preferred alternative, the spur trail has been deleted, a portion of the Bay Trail has been routed around the west side of Headquarters Hill, and the spur trail has been relocated to the City of Novato property. These changes would move access further away from most

of the upland habitat and seasonal habitat proposed in the preferred alternative, which would enhance the probability of nesting in the majority of these areas.

I-35.20

Potential corrective actions are noted in the last paragraph of Mitigation Measure BIO-8 on page 4-85. Whether and when corrective actions are undertaken is part of the adaptive management approach described in this measure and in the updated Monitoring and Adaptive Management Plan included as an appendix to the Final SEIR/EIS.

I-35.21

Comment noted. As discussed in prior response, the addition of an expanded pond in the preferred alternative is expected to enhance the habitat value of the pond. The preferred alternative includes over 270 acres of seasonal wetland, which is more than the original Alternative 2 and is substantially more seasonal wetland than either of the other alternatives evaluated in the SEIR/EIS.

I-35.22

The preferred alternative, revised Alternative 2, would provide over 270 acres of restored seasonal wetland. The existing site contains 114 acres of seasonal wetlands and an average amount of 151 acres of agricultural ponding wetlands, which are considered of significantly lower value than the existing seasonal wetlands. The revised alternative 2 was selected as the preferred alternative, in part, because it provided a substantially larger seasonal wetland component that better meets the project goal of a diverse array of wetland and other wildlife habitat, while still providing substantial tidal marsh areas to support threatened and endangered species.

Regarding access, mitigation measures are proposed to reduce potential access impacts on adjacent seasonal wetland habitats.

I-35.23

It is presumed that the reference to “wetland loss” should actually be to “grassland lost.” As described in Master Response 1 concerning the preferred alternative, the spur trail has been deleted, the last portion of the Bay Trail has been routed around the west side of Headquarters Hill, and the spur trail has been relocated to the City of Novato property. These changes move the potential effects of access to the western edge of the swale area. Due to these changes and the inclusion of approximately 250 acres of upland habitat in the preferred alternative, are considered sufficient to offset the loss of existing grasslands.

See habitat/species discussion above in response to I-35.10

I-35.24

See also Master Response 1 regarding deletion of the spur trail, routing of the Bay Trail, and relocation of the spur trail, all of which would reduce access impacts on the upland/transition habitat. Regarding Mitigation Measure BIO-8, potential corrective actions are noted in the last paragraph of Mitigation Measure BIO-8 on page 4-85. Whether and when corrective actions are undertaken is part of the adaptive

management approach described in this measure and in the updated Monitoring and Adaptive Management Plan included as an appendix to the Final SEIR/EIS.

The alternatives include the construction of a new levee with an intertidal berm that will provide high tide refugia for the California clapper rail, California black rail, salt marsh harvest mouse, and other species. As noted on page 3-17, seeding or planting of non-tidal habitats (e.g., seasonal wetland, upland, high transition marsh) would be conducted as necessary. It is anticipated that the plant community for the high-marsh transition habitat area will include species commonly found in this zone including, picklweed, saltgrass, fat hen, alkalai heath, jaumea, and gum plant; many of these species will likely colonize the site following the breaching of the outboard levees. The initial planting mix and methodology (e.g., planting, natural colonization) for this area will be determined during the detailed design phase of the project. The need for any supplemental planting will be determined based on the results of the post-restoration vegetation monitoring program.

I-35.25

Figure 3-6 shows a schematic cross section of habitats restored under Revised Alternative 2 (the preferred alternative). With regards to impact of access, as described in Master Response 1 concerning the preferred alternative, the spur trail has been deleted, the last portion of the Bay Trail has been routed around the west side of Headquarters Hill, and the spur trail has been relocated to the City of Novato property, all of which reduce access impacts to high marsh/transition areas.

Regarding Mitigation Measure BIO-9, whether and when corrective actions are undertaken is part of the adaptive management approach described in this measure and in the updated Monitoring and Adaptive Management Plan included as an appendix to the Final SEIR/EIS.

I-35.26

See Master Response 12 regarding existing wildlife habitat. See also Master Response 11 regarding Habitat Design (Amount of Upland Habitat), and Master Response 1 regarding deletion of the spur trail, routing of the Bay Trail, and relocation of the spur trail, which would reduce affects on the upland areas. Impact BIO-22 concerns loss of foraging habitat for golden eagle and burrowing owl. Burrowing owl have not been found to date on the site, although as noted in the Draft SEIR/EIS, this does not preclude their potential presence. The preferred alternative includes approximately 250 acres of upland/grassland that is expected to offset the loss of about 128 acres of existing grassland and provide foraging habitat for raptors.

See habitat/species discussion above in response to I-35.10.

I-35.27

See Master Response 12 regarding existing wildlife habitat; Master Response 11 regarding habitat design (Amount of Upland Habitat); and Master Response 1 regarding deletion of the spur trail, routing of the Bay Trail, and relocation of the spur trail.

See habitat/species discussion above in response to I-35.10.

I-35.28

See Master Response 1 regarding deletion of the spur trail, routing of the Bay Trail, and relocation of the spur trail would avert access impacts in upland/transition habitats near to the new tidal mudflats which would be utilized by shorebirds.

See habitat/species discussion abovein response to I-35.10. The preferred alternative includes approximately 137 acres of seasonal wetland habitat that will be receive overflow from Pacheco Pond during wet season high flow conditions, and another 140 acres of seasonal wetland habitat will receive overflow from the Bel Marin Keys South Lagoon. These shallow ponded areas will provide refugia for migratory shorebirds during high tides.

I-35.29

The last paragraph reflects early considerations for only the portion of the proposed Bay Trail between the City of Novato levee and Pacheco Pond and concerned the existing dirt road visible on figure 3-5 just east of Landfill 26, the open field/concrete areas east of the dirt road, and the new levee to be built on the west side of the HAAF restoration area. This paragraph has been updated to reflect the actual designs of the 3 alternatives, all of which place the Bay Trail on the new levee to be built as part of the HWRP, which is identified in Impact BIO-27 as resulting in little additional impact to wildlife beyond that of the levee construction which was covered in the 1998 EIS/EIR for the HWRP.

Regarding a potential alternative along City Streets or through the City property near landfill 26, the comment is not specific as to what City Streets or which portion of the City property around Landfill 26 the commenter is referring to. Also see discussion under response to Comment I-36.4 below, regarding a potential route around the south side of Ammo Hill via City streets in the Industrial Park to the west side of Pacheco Pond.

I-35.30 and I-35.31

See General Response to Comment I-35 above.

The discussion of the Bay Trail studies and BCDC's draft report does not minimize the results of these prior study and planning efforts, but describes the nature of these studies, and noted on pg.4-93, as the commenter also notes that "the 8 field studies all showed some adverse effect on wildlife from trail activity." The commenter dismisses 4 of the possible measures as having little relevance to protecting wildlife; however all of the dismissed measures are noted in the context of funneling access to designated routes to reduce the potential of access to sensitive areas via informal routes. Informal routes can and do often have effects on wildlife. The location of the interpretive center in the preferred alternative is an incorporation of one of the measures that the commenter dismisses. Citing of these potential methods is intended to highlight considerations for incorporation in the final trail design.

Comments regarding the mitigation measure components and their desired features are noted. However, the lead agencies disagree with the assertion that the potential suite of mitigation measures mentioned in Mitigation Measures BIO-11, BIO-12, and BIO-17, as incorporated into final trail design and a trail management plan to be developed in coordination with BCDC, DFG, USFWS, Marin County, the City of Novato, and the Bay Trail project, would not mitigate the access impacts of the preferred alternative to a

less-than-significant level, in the context of this restoration project and in comparison to the existing baseline.

The description in the Draft SEIR/EIS of Mitigation Measure BIO-11 was not intended to preclude consideration of the potential measures mentioned in Impact BIO-28. The text of the measure has been updated to include consideration of all the mentioned measures.

I-35.32

Impact BIO-29 discusses the Bay Trail portions proposed to extend southward and northward from the City of Novato levee at Hamilton. A new figure has been added to this part of the document to provide the reader with better geographical reference to the trail segments.

The grassland along the southern extension is west of the existing road/concrete area (which is already informally used as a trail and by periodic vehicles) where the trail is proposed. The seasonal wetlands north (and also) east of the southern extension are shown on figures 3-1, 3-5, and 3-8 and are the seasonal wetlands located in the southwestern bulge of the Hamilton restoration area. Mitigation Measure BIO-12 identifies the measures proposed to reduce impacts of access on adjacent habitats. Because a portion of the southward trail would eventually be directly adjacent to seasonal and tidal wetlands in this area, the mitigation measure specifies establishment of seasonal closures during breeding seasons of sensitive species in consultation with DFG and USFWS once sensitive species begin to use the restored wetland areas. Closure of the trail during migration of waterfowl or shorebirds through the area is not considered necessary to reduce this impact to a less-than-significant levels, unless these are sensitive species breeding in the restored tidal or seasonal wetlands at this location., in the context of the HWRP/BMKV project and in comparison to the existing baseline.

I-35.33

As described on page 4-97, the levees and berms would continue to provide predator access. Predator access would be reduced compared to the existing condition with the introduction of tidal flows, and with the reduction in height of the perimeter levees (east of the new outboard levee) to an approximate high-tide level. The analysis concludes that existing predator access would be reduced with implementation of the project. The precise locations of the internal peninsulas would be determined in the detailed design phase. It is important to note that NEPA and CEQA assessment of impacts are based on a comparison to the existing setting.

I-35.34

Impact BIO-31 has been updated to include discussion of impact on pile-driving to common fish species. However, because of the limited duration and effect area due to the size of the pile-driving equipment to be used, no population-level impacts to fish are expected (as already noted on page 4-99). Potential mortality of individual common fish is not considered a significant impact. Specific measures to reduce impacts related to listed fish species and marine mammals would be determined in consultation with NMFS. It should be noted (as identified on page 4-98) that the size of pile-driving equipment and the duration of pile-driving activity to be used for this project are far smaller than the recent and ongoing pile-driving activity associated with the Carquinez Bridge or the proposed pile-driving for the Bay Bridge East Span project, and the nature of impact would resulting be much more limited. The mitigation measure does not restrict the potential use of other measures such as bubble curtains, but the specific measures

should be determined in consultation with NMFS in light of the specific details of proposed pile-driving activity, which would help to more precisely characterize this impact to support consultation.

I-35.35

The Draft SEIR/EIS identifies approximately 2.7 acres of construction disturbance of habitat, assuming a 50-foot width of disturbance. Permanent loss would be less and would depend on the width of trail features in wetland areas. The Bay Trail in Alternative 1 would not be implemented because Revised Alternative 2 is the preferred alternative. See response to Comment I-36.4 below concerning a suggested alternative routing for Bay Trail along City streets, land, and a different location to cross Pacheco Creek. Comments regarding mitigations noted. Restoration of riparian habitat along the tributaries to the pond is considered a feasible mitigation.

I-35.36

See Master Response 13 regarding Bay Trail routing, trail spurs, and dog use.

See response to Comment I-36.4 concerning MCL's suggested alternative routing further west. The Draft SEIR/EIS already identifies 2 alternatives that avoid the impacts associated with a trail route west of Pacheco Pond, Revised Alternative 2 and Alternative 3. Trail routings that are entirely inconsistent with local and regional planning for the Bay Trail do not meet the project objective concerning access. A reasonable range of alternatives that meet the project objective concerning access and are demonstrably feasible have been considered and analyzed in the document.

Trails further west of Pacheco Pond may or may not be feasible. Nothing in the proposed project precludes any action to create such trails if other parties propose them. However, as noted in the response to Comment I-36.4, these areas are outside the area of authorization for federal involvement related to the HWRP and the lands owned by the Conservancy thus limiting federal and state sponsor involvement relative to the HWRP.

Mitigation measures are identified in the document that are feasible and can reduce the effects of trail access on biological resources to a less-than-significant level, particularly so in the preferred alternative.

I-35.37

The preferred alternative does not include a spur trail. See Master Response 1.

I-35.38

The preferred alternative does not include a spur trail. See Master Response 1. Gated access of the NSD levee/berm is essential to preventing public access to the tidal marsh restoration area. Buffers and barriers would be determined in the detailed design phase. Feasible mitigation measures are identified in the document.

I-35.39

The preferred alternative does not include a spur trail. See Master Response 1. Mitigation measures are identified in the document that are feasible in relation to a spur trail.

I-35.40

As described on page 3-21, an interpretive center is conceptually envisioned as a building that would house exhibits that provide information about the wetland restoration projects and the local flora and fauna. It is also one of the project objectives to provide "for public access that is compatible with protection of resource values and with regional and local public access policies" (page 2-3 and 2-4). Interpretive facilities facilitate protection of resource values, not only on the site, but elsewhere through the education provided to users of the facilities.

As discussed in Master Response 1 regarding the preferred alternative, the location of the interpretive center has been relocated to City of Novato property on the HWRP site. Impacts of the location at BMKV were analyzed in the Draft SEIR/EIS. The HWRP site already has an existing dirt road that reaches the proposed location. The location is adjacent to the future City park proposed at Landfill 26. The location is consistent with local public access policies and plans, which is an objective of the project.

The impacts of placing a center at the proposed location are considered less than significant and thus analysis of further alternative sites beyond those in the document is not necessary to avoid significance effects.

I-35.41

See Master Response 18 regarding climate change.

I-35.42

The off-loading facility must be located at the –24 to –28 foot mean lower low water (MLLW) contour to enable large scows and transports to moor and off-load (page 3-15). Although 2 different pipeline alignments are proposed, this 1 location for the off-loading facility has been identified because it is the closest location with suitable depth.

I-35.43

The preferred alternative, Alternative 2, has been revised to incorporate comments received from agencies, the public, and interested organizations, the response to comments presented in this document, and the revised analysis in the Final SEIR/EIS. As such, it represents the environmentally superior alternative, as well as the preferred alternative, and the impacts identified in the Draft SEIR/EIS would represent a conservative analysis (i.e., the impacts identified for Alternative 2 in the Draft SEIR/EIS would be reduced with implementation of the preferred alternative) in relation to access. Further, mitigation is identified and proposed to reduce access impacts of the preferred alternative.

Comment Letter I-36

September 13, 2002

Mr. Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530

Re: BMKV Draft EIR/EIS

Dear Mr. Gandesbery:

The Marin Conservation League(MCL) would like to offer the following comments regarding the Draft Supplemental EIR/EIS addressing the Bel Marin Keys Unit V expansion of the Hamilton Wetland Restoration Project. We appreciated the extra time allowed for submitting our comments. We had difficulty securing a copy for review.

MCL has been a proponent of marsh restoration at Hamilton Field and BMKV for many years. We congratulate the Conservancy and the Corps for now making it possible and appreciate this opportunity to comment on the environmental issues with which you are confronted. The technologies needed to accomplish the project frequently exceed the ability of a layperson to evaluate, but here are some observations for which there could be additional, clarifying information.

The projected time period for the creation of either Alternative 1 or Alt. 2 is about 10 years. During that time there would be considerable earth movement to create the upland peninsulas, stockpile topsoil, build new levees, and introduce dredge spoils. Mitigation measures address avoiding construction during nesting months if there are nest sites found. There exists 1576 acres of habitat with special status species in residence. Can the project be phased so that all the existing habitat is not demolished all at once and some of the existing resident species can continue to survive while the new improved habitat is being readied? If so, how can this be achieved? How would this affect the timeframe and cost? I-36.1

Mitigation measure BIO-8 addresses a 15 year monitoring program to determine the success and rate of tidal coastal salt marsh restoration with some proposed corrective measures if the results do not meet expectations. BIO-9 has a 5 year monitoring program which also recommends remedial actions if the results for brackish open water, emergent marsh and/or seasonal wetlands are not up to expectations, but the potential remedial actions are not identified. There should be some suggested remedial actions. I-36.2

Impact BIO-25 discusses the potential for spread of invasive non-native plants within the restoration area during construction. Mitigation 10a recommends an herbicide spraying program prior to construction. Please suggest other ways of suppressing the spread of invasive weeds. It seems counterproductive to mitigate herbicide and pesticide contamination on site and introduce some at the same time. I-36.3

The Bay Trail alignment north of the HWRP in all alternatives is problematic. The alignment MCL has advocated has been south/west of Pacheco Pond on a route that goes south of Ammo Hill, crossing the Pacheco Creek at a narrow point to the industrial park, crossing San Jose Creek at another narrow point and then following the shore of Pacheco Pond outside the chainlink fence that separates the industrial park from the pond. This would have the least impact on wildlife, would benefit the thousands of people who work at the industrial park and are looking for more pleasant walks than just around a city block. Please discuss this alignment feasibility in the EIR/EIS. I-36.4

The levees are considered upland habitat in the evaluation of resultant habitat types and acreage. With a Bay Trail or spur being considered for all but the most outboard levees, can they be considered habitat, since it is acknowledged in the EIR/EIS that trails discourage wildlife use? I-36.5

The off-loading facility and pump station for the dredge slurry is proposed to be located some 3000' from the project site. Consideration was given to fuel spill from the pumps and booster pumps on this very long 18" steel pipe and mitigation for potential spills, but the potential for a pipeline rupture was not discussed. Are there automatic shutdown mechanisms that could protect the bay from inadvertent dredge spoil dumping? I-36.6

There are a number of issues that are being negotiated with the Marin Flood Control District and the BMK CSD with project sponsors. Although the plan and EIR/EIS seem to address the flooding issues as expressed by the BMK residents, there seems to be some possibility the plan could be adapted changing the environmental benefits of the project. Will the environmental community have an opportunity to comment on such changes prior to any negotiated agreements? I-36.7

Thank you for this opportunity to comment. We look forward to subsequent meetings at which the final preferred plan is discussed.

Yours truly,

Kathy Lowery
President

I-36 Marin Conservation League

I-36.1

The site preparation phase (Phase I) is only about 2 years. However, as described in the Draft SEIR/EIS, this phase would involve disruption of existing habitats onsite due to levee construction, excavations and salvage of topsoil, and removal of existing infrastructure and preparation for dredged material placement. While mitigation measures are proposed, for example, to avoid nest destruction of special-status birds, since dredged material placement would be used on much of the site to raise elevations from the current subsided levels and the site must be prepared to receive dredged material and much of the existing habitat inside the perimeter levees would be affected during the first 2 years of the project. However, construction activity over those 2 years would be expected to move around the site and not disturb all areas at the same time. The dredged material placement phase (Phase 2) would last around 10 years and would be done in phases on the separate areas onsite. The neighboring areas not presently being filled would be available for use by resident species in the interim. It should be noted that tidal marsh is only located outside the perimeter levees. While some nearby construction activity may disturb species in tidal marsh due to noise, the direct disturbance of habitats outside the levee would occur during Phase 3 when outer levees are breached. However, the breaching of the levees represents the end of the construction period.

It should be noted that the entire 1,576-acres of the site does not contain sensitive species habitat. As noted on table 4-7, about 1,200 acres of the site are presently in agriculture, of which only an average of 150 acres ponds annually. These areas are disturbed presently through agriculture activities, and their disturbance, though reducing forage and habitat for common species, is not considered a significant impact on wildlife. The remaining acreage varies in quality, some of which, like coastal salt marsh and seasonal wetlands, support sensitive species habitat.

I-36.2

As discussed in the Monitoring and Adaptive Management Plan, which has been updated from the draft in the 1998 EIS/EIR for the HWRP to include the BMKV expansion, corrective actions could include vegetation management, predator management, topographic modifications such as creation of or enlargement of channels, or levee repairs or modifications. This plan has been included as an appendix to the Final SEIR/EIS.

I-36.3

Mitigation Measure 10a includes construction controls (e.g., wash stations). The mitigation measure notes that the recommended control measures may include wash stations and development of an herbicide spray program, but does not preclude other control measures that may be recommended by the qualified botanist. Any use of herbicides would comply with current state and federal regulations for herbicide application for weed control and handling.

The reference to "mitigate herbicide and pesticide contamination" on the site presumably refers to the discussion in the *Hazardous Substances and Waste* section in chapter 4. As noted in that section, the site investigations of the BMKV expansion site have not identified any widespread herbicide or pesticide

contamination. Several discrete areas of shallow soil contamination containing DDT and dioxins/furans, probably related to prior pesticide/herbicide use. However, as noted in Mitigation Measure HAZ-1, the Conservancy would coordinate with DTSC (and SFRWQCB in addition) for any required site-cleanup of these limited areas. These identified areas are likely related to storage of, and potential spills of, pesticides or herbicides at former agricultural activity centers and do not reflect any widespread contamination related to agricultural spraying or use at the site.

I-36.4

The alternative suggested by MCL would appear to be located on land owned by the City of Novato, possibly the Marin Humane Society, possibly private lands in the Industrial Park, MCFCWCD, and on public street(s) in the Industrial Park. First, none of these lands are owned by the federal and state sponsors of the HWRP and the BMKV expansion. While this does not necessarily conclude anything about the feasibility, per say, of a trail along the alignment suggested, it is outside the authorized project area for federal involvement and outside of areas controlled by the Conservancy, which may indicate the suggested alternative is of lower feasibility than the preferred alternative, which is largely on federal and Conservancy-owned land.

Second, one of the HWRP/BMKV project objectives, as noted in chapter 1 of the Draft SEIR/EIS is to:

"*Provide for public access that is compatible with protection of resource values and with regional and local public access policies*"

As noted in the *Land Use* section of chapter 4 (see page 4-111 of the Draft SEIR/EIS), the Marin Countywide Plan and the City of Novato General Plan both presently contain an alignment north from Hamilton to Bel Marin Keys Boulevard along the eastern side of Pacheco Pond. Further, the City of Novato, studied various Bay Trail options in their Hamilton Public Access Bay Trail Plan (City of Novato 2001). This plan identified that "the streets and existing utility easements within the Novato Industrial Park are not appropriate for a main trail designation because of the lack of right-of-way, potential security issues, lack of adequate visibility, and orientation of the business uses in this area" (page 24). However, the plan goes on to state that "they could be considered for local connections to the Bay Trail…but not as a primary route." The City, County, and the ABAG Bay Trail project all participated in the workshops in fall of 2001 during the conceptual design phase. All have commented on the Draft SEIR/EIS without objection to the routings shown for the main Bay Trail. The County CDA did not express a preference as to west or east of Pacheco Pond; the City of Novato supports a Bay Trail route east of Pacheco Pond as consistent with its General Plan. The project sponsors, in developing the alternatives and selecting those for analysis in the Draft SEIR/EIS took into account the local and regional public access planning and policies and selected alternatives for analysis that could meet the aforementioned objective. All local planning called for a Bay Trail route either east or west of Pacheco Pond; none called for a route through the Industrial Park itself.

The land use and biological effects of the different Bay Trail alignments are analyzed in chapter 4 of the Draft SEIR/EIS and mitigation is proposed where significant effects are identified. It should be noted that most of the existing expansion site primarily consists of agricultural and ruderal land that does not presently support sensitive plants or listed federal or state species, except in the case of occasional foraging by several listed bird species. Habitat for listed species is located outside the outboard levees along Novato Creek and San Pablo Bay and no trail routing is included to or near these areas in the preferred alternative. As a baseline for assessment under NEPA and CEQA, the existing conditions are

used for assessment of impact. Future establishment of habitats that may support listed species is an output and a benefit of the project, but these habitats (e.g., tidal marsh) are not currently established on areas where the Bay Trail is routed in the preferred alternative.

The project includes development of specific trail design measures and a trail management plan in concert with relevant local, state, and federal agencies to minimize effects on existing and future wildlife. The Draft SEIR/EIS concludes that with the proposed mitigation, the effect of routing a trail as described in Revised Alternative 2 (the preferred alternative) would result in a less-than-significant effect on the environment under NEPA and CEQA.

It should also be noted that the potential spur trail to Novato Creek was deleted from Alternative 2 in the preferred alternative in part due to concerns about potential effects of construction and access to existing habitat in Novato Creek and concerns about future management of access related to restored tidal wetland habitat.

I-36.5

In the preferred alternative, there would be no designated trails on the BMK south lagoon levee, the new outboard levee adjacent to the tidal marsh restoration area, or the levees on the north or south of the seasonal wetland area. The upland habitat in the preferred alternative is located from the BMK south lagoon eastward, southward, and westward. Only the upland adjacent to the Bay Trail around the east side of Pacheco Pond would be affected by trail use. The majority of the upland in the swale would not be affected by trail use.

I-36.6

The comment is noted. The pipeline engineering specifications are presently being determined (as part of the HWRP). Pipeline design would be done to handle the range of expected pumping pressures. The offloading facility would be actively manned during offloading of dredged material, allowing for shutdown in the event of pipeline rupture. These project controls would be expected to reduce the potential for significant loss of dredged material to a less-than-significant level.

I-36.7

See Master Response 3 regarding flood zoning and MCFCWCD easements, which discusses the Agreement between the Conservancy, the City of Novato, and the MCFCWCD, which is included as an appendix to the Final SEIR/EIS. The Agreement sets up a process to conduct a confirming hydrologic and hydraulic study to provide the support for the County analysis of the F2 zoning and existing easements. The project sponsors consider the studies conducted to support the impact assessment have adequately assessed potential flooding and not identified a significant environmental effect under NEPA or CEQA, but are willing to fund the additional study to support the County in its separate determinations.

The only scenario in which the project would need to be modified pursuant to the Agreement is if the additional study did not confirm the result of the studies conducted to date and identify an adverse effect of the project on flooding, which is considered by the lead agencies to be highly unlikely. If this were to occur and changes to the project were necessary, the lead agencies would need to determine whether or not additional NEPA and CEQA compliance is or is not necessary pursuant to project changes.

Pursuant to the BMK CSD, there will continue to be consultation because the BMK CSD holds certain maintenance and drainage easements on the BMKV property and has facilities located directly adjacent to the expansion site. However, the preferred alternative has been designed to comply with those easement, such that substantial changes in the design (that might affect habitat components) are not expected to be necessary during the detailed design phase. Similar to the discussion above, if substantial changes were identified as necessary, the lead agencies would need to determine whether or not additional NEPA and CEQA compliance is or is not necessary.

As noted in Master Response 1, Alternative 2 has been revised as the preferred alternative in the Final SEIR/EIS in response to comments provided on the Draft SEIR/EIS and based on lead agencies evaluation of the project purpose and objectives. While some of the changes do improve certain capacities of the site relative to flooding, the overall habitat component of the revised Alternative 2 are believed by the lead agencies to best meet the project goal and objectives.